

THE BLAND LEADING THE BLAND: LANDSCAPES AND MILESTONES ON THE JOURNEY TOWARDS A POST-2015 CLIMATE CHANGE AGENDA AND HOW DEVELOPMENT EDUCATION CAN REFRAME THE AGENDA

Fumiyo Kagawa & David Selby

Abstract: After overviewing the global climate change threat, **Fumiyo Kagawa** and **David Selby** identify elements that would comprise comprehensive climate change education of transformative intent. In the light of this, they go on to critically review the presently emerging post-2015 development and climate change agenda as encapsulated in the Sustainable Development Goals. They also scrutinise the outcomes of four gatherings feeding into that agenda – the World Conference on Education for Sustainable Development, the Lima Climate Change Conference, the World Conference on Disaster Risk Reduction and the World Education Forum. They discern a signal failure to engage with neoliberalism and its workings as a root driver of climate change and a correlative failure to mainstream the holistic and transformative educational response that the climate crisis warrants. They end by suggesting how development education might play a formative role in reframing the post-2015 agenda.

Key words: Climate change; climate justice; disaster risk reduction; neoliberalism; Sustainable Development Goals; education for sustainable development; development education; climate change education.

The global climate change landscape

With the great ‘Burns Night Storm’ of 25 January 1990 raging all around him, English lepidopterist Mathew Oates, felt assailed by animosity. ‘The anger – or was it hatred? – in the sky that day filled me, not so much with awe, but with fear. Having seen that apocalyptic sky it was no longer possible to deny climate change as a reality’ (Oates, 2015: 222).

Oates' moment of intuitive conviction about the climate change threat – something before and since experienced by millions – now chimes with the scientific consensus. That consensus says that unchecked climate change poses a self-inflicted existential risk to humanity (Klein, 2014: 15; Selby, 2015a: 113). In their latest summary of the science of climate change, the international collectivity of scientists comprising the Physical Science Working Group of the UN Intergovernmental Panel on Climate Change (IPCC) confirmed that the warming of the global climate system is 'unequivocal' with 'many of the observed changes unprecedented over decades to millennia,' that it is 95 percent certain that largely through voracious use of fossil fuels, 'human influence has been the dominant cause of the observed warming since the mid-20th century,' and that 'limiting climate change will require substantial and sustained reductions of greenhouse gas emissions' (2013: 4, 17, 19).

Hard on the heels of the physical science report of the IPCC came the report of a second working group focusing on the impacts and risks of climate change and on adaptations that would be needed to lessen human vulnerability to risk. This report identifies 'key risks' related to 'dangerous anthropogenic interference with the climate system' including serious erosion of ecosystems and cultural systems (with only limited adaptive capacity); increasing incidence and severity of extreme weather events (the 'hatred' Oates felt in his bones?); increasingly uneven distribution of climate impacts with disadvantaged people and communities suffering most; extensive biodiversity loss; increasing food insecurity; and abrupt and irreversible singular events such as the final collapse of the polar ice sheets, and the implosion and burning of the equatorial rainforests (IPCC, 2014, 12). The authors identify a range of 'interacting social, economic and cultural factors' that have been 'incompletely considered to date' but are having and will have a bearing upon climate change and its impacts on interlinked human and natural systems. Those factors include 'wealth and its distribution across society, demographics, migration, access to technology and information, employment patterns, the quality of adaptive responses, governance structures, and institutions to resolve conflicts'. Their call is for 'exploration

of a wide range of socioeconomic futures in assessment of risks' (ibid: 11). 'Throughout the 21st century', the report goes on to say, 'climate-change impacts are projected to slow down economic growth, make poverty reduction more difficult, further erode food security, and prolong existing and create new poverty traps' (ibid: 20).

These two recent IPCC reports are suggestive of an agenda for formal, informal and non-formal child/youth and adult education that would equip learners with the knowledge and understandings as well as the proactive capacities and dispositions for addressing the existential risk that is climate change. The physical report speaks to learning that comprehensively explores the processes and dynamics driving and following from the warming of the planet (i.e. the mechanisms and physical repercussions of the so-called 'greenhouse effect'). The impact report speaks to wider learning that comprehensively addresses the social and economic drivers as well as the social and economic ramifications and reverberations of climate change.

So far, climate change learning has generally been corralled in physical geography and science disciplines and more or less limited to the science of global warming and to 'green' technological fixes for climate change mitigation and adaptation (UNESCO/UNEP, 2011: 55). There is a hidden agenda of 'business as usual' in which the social and economic drivers behind the heating of the planet are denied curricula space and, hence, any critical interrogation by learners. Those drivers include the triumphalist neoliberal economic growth and economic globalisation models and their culpability in fomenting climate change. They also include the insatiable levels of consumerism in the global North and amongst elites in the global South (Selby, 2015b; Selby & Kagawa, 2011a). Then, at a fundamental cultural-psychological level amongst the affluent, are the processes of avoidance and denial that keep 'eyes wide shut' (Hilman et al., 2007: 85) to the impacts of their lifestyles and, for both affluent and poor, an increasing removal from immersion in natural place that renders us less ready to protect nature and, hence, more passively compliant in its ruination, something Monbiot (2012) calls the 'second environmental crisis'. These, too, are

important features in the climate change education landscape and need to be included in learning programmes designed to break out of the mould of ‘business as usual’ (Selby, 2015b; Selby & Kagawa, 2011a).

Compounding the lack of transformative intent in many current climate-change learning programmes is a failure to address climate justice. Climate justice education helps learners understand how climate change impacts are already falling unequally on nations and communities in the global South who bear least responsibility for greenhouse gas emissions and looks at the ‘why’ and ‘how’ of restorative justice on the part of polluting nations through social justice lenses. Climate justice education also seeks to foster a value system that will ensure welcoming, humanitarian responses in host countries to migrants displaced by the impacts of climate change (Selby, 2015c).

The two recent IPCC reports were issued as the international community followed three intersecting roads towards a post-2015 development and climate change agenda. The first was the road determined at the UN Conference on Sustainable Development (Rio+20) in 2012 where world leaders agreed to forge a new development agenda to build on but also supersede the Millennium Development Goals that were due to lapse in 2015. The second was the road to Paris leading to the December 2015 twenty-first session of the Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) with its goal of achieving a comprehensive international agreement on climate action to keep global surface temperatures below a 2°C increase on pre-industrial levels. The third involved the development of a post-2015 disaster risk reduction framework. What follows is a critical scrutiny of the 2014 and 2015 journeys along each road. We enquire if the nettles of climate change and transformative climate change education are indeed being grasped. Our article ends by proposing ways in which the development education sector might reframe the agenda setting through its education and advocacy policy and practice.

The sustainable development landscape

The eight Millennium Development Goals (MDGs) – eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainable development, develop a global partnership for development – were proclaimed ‘with surprising unanimity’ (Lewis, 2005: 3) at the UN Millennium Assembly in 2000. Interestingly, the notion of sustainable development already very current in 2000 and the ‘three-pillar’ understanding of it as having economic, social and environmental dimensions – something encapsulated in the Millennium Declaration itself – were not captured in the actual Goals. At Rio+20 in 2012 the decision was made to forge a new post-2015 development agenda with sustainable development at its core (Matenga, 2015: 280-281). The process of determining Sustainable Development Goals (SDGs) was thus set in train with an intergovernmental Open Working Group (OWG) mandated to orchestrate their draft development through a refreshingly multi-voice, participatory process. OWG deliberations took place between March 2013 and July 2014 at which point a report was submitted to the UN General Assembly. The Assembly adopted the report as the ‘main basis’ for the post-2015 agenda in September 2014 (Adams & Tobin, 2015: 5; Ford, 2015).

There are seventeen SDGs, for the realisation of which 169 somewhat more concrete targets have been laid down. We enumerate below just a few of the goals that are particularly germane to our unfolding argument:

- End poverty in all its forms everywhere (SDG 1);
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG 4);
- Promote sustained, inclusive and sustainable economic growth (SDG 8);

- Reduce inequality within and among countries (SDG 10);
- Ensure sustainable consumption and production patterns (SDG 12);
- Take urgent action to combat climate change and its impacts (SDG 13);
- Promote peaceful and inclusive societies for sustainable development (SDG 16).

(Sustainable Development Knowledge Platform, 2014)

Looking behind the broad aspiration of the seven SDGs listed we find, *inter alia*, the following targets:

- By 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters (SDG 1, Target 5);
- By 2030 ensure all learners acquire 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 (SDG 4, Target 7);
- Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries (SDG 8, Target 1);

- Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning (SDG 13, Target 3).

A number of things merit remark. First, noticeable through its absence in the SDG process and outcomes has been any attempt to offer a precise working definition of ‘sustainable development’. Those making the real decisions have felt more comfortable with not shining too bright a light on meaning. There has likewise been an absence of acknowledgement that the term is of disputed meaning and value. ‘The current hype around using sustainable development as an anchor for the next wave of international development goals’, writes Chrispin Matenga (2015: 281), ‘seems to be oblivious to the fact that sustainable development is still a contested concept’. Much of that contestation surrounds whether ‘sustainable development’ is coterminous with ‘sustainable growth’. Unremitting economic growth is at the core of the globalised neoliberal economic model, a model widely held to be the backbone of structural causes of poverty and the culprit behind ‘persistent levels of poverty and climate change’ (McCloskey, 2015). Or, put another way, it is a ‘hegemonic force blocking transitions towards genuine sustainability’ (Huckle & Wals, 2015: 491).

The SDG development process and the SDGs themselves have become riddled with fudge to sooth the neoliberal behemoth. As we have seen, SDG 8 calls for ‘sustained, inclusive and sustainable economic growth’, something widely held to be incompatible with social, cultural and environmental sustainability. Target 4 under the same goal had the qualifier ‘endeavor’ added ahead of an original text that read ‘to decouple economic growth from environmental degradation’. SDG 13 on climate change was the focus of a constant battle in OWG negotiations with more powerful countries, the greatest emitters of greenhouse gases, arguing that the subject should be left out of the post-2015 sustainable development agenda. Resistance by the Small Island Developing States ensured its retention as an SDG when a rider that climate change was primarily a UNFCCC responsibility was added to the text. The outcome is a weakened SDG 13 in

which targets for keeping the global temperature rise below 2⁰C, for linking climate change mitigation with the phasing out of fossil fuel use and for climate justice initiatives are missing. Regarding SDG 12 ('Ensure sustainable consumption and production patterns'), a sop to the corporate sector was a rather toothless Target 6: 'encourage (not 'require') companies, especially large and transnational companies, to adopt sustainable practices'. Seeing the neoliberal lie of the land, the Campaign for People's Goals on Sustainable Development is clear that the SDGs taken as a whole would not ensure environmental sustainability in that they 'do not face up to what it will take to stay within the environmental ceiling – especially with unlimited GDP growth as the driving economic paradigm' (Adams & Tobin, 2014: 13-14, 21-2).

The educational SDGs and targets are lacking in many significant respects. SDG 4, Target 7, on education for sustainable development and other 'adjectival' educations omits mention of climate change education, disaster risk reduction education (i.e. education for disaster preparedness, to mitigate disaster drivers and to build community resilience) and biodiversity education although these three 'educations' were the key action themes for the second half of the 2005-2014 Decade of Education for Sustainable Development (UNESCO, 2010). The balance of 'educations' listed under Target 7 reflects the weighting against the environmental sustainability dimension that has been discerned across the SDGs (Adams & Tobin, 2014: 21). Target 7, not altogether unexpectedly, fails to reference learning that exposes the growth economy and consumerism to scrutiny and likewise draws back from intimating that learners explore no-growth and de-growth or 'steady state' economic alternatives and lifestyles. SDG 13, Target 3, on climate change education is similarly bereft of alternatives to 'business as usual' and, while making general mention of education on climate change mitigation, adaptation and impact reduction, fails to specify consideration of the drivers pushing us towards and through the 2⁰C barrier. No clear links are made to education for disaster risk reduction. It is instructive in this regard that the UNESCO publication exploring 'how education can contribute to the proposed post-2015 goals' foregoes the opportunity to

elaborate on Target 13 and, blandly, restricts itself to recommending climate science education ('One vital role education can play is in improving understanding of the science behind climate change and other environmental issues') and to the rather platitudinous assertion that 'education helps build resilience and reduce vulnerability in the face of climate change impacts' (UNESCO, 2014a: 11-12).

While Gerard McCann (2015: 331) is right to suggest that 'Building on the fragile platform of the MDGs, the Sustainable Development Goals present an opportunity to reverse some of the damage caused by market fundamentalism over the past twenty years', we are not overly optimistic. But are we expecting too much of a set of goals and targets hammered out on the anvil of diverse national interests? We address that question in the final section.

Milestones along the road towards the post-2015 development and climate change agenda

Milestone 1: UNESCO World Conference on ESD, Aichi-Nagoya, Japan [November 2014]

To mark and celebrate the close of UN Decade of Education for Sustainable Development (DESD), 2005-2014, UNESCO and the Government of Japan organised the World Conference on Education for Sustainable Development (WCESD), under the banner of 'Learning Today for a Sustainable Future.' Held from 10 to 12 November 2014 in Aichi-Nagoya, Japan, the overall objectives of the conference were to provide an opportunity to review and consolidate DESD outcomes and set the agenda for further promoting ESD beyond 2014. WCESD adopted the *Aichi-Nagoya Declaration on Education for Sustainable Development*. It also launched the *Global Action Programme (GAP) on Education for Sustainable Development* as the official follow up to DESD.

The *Declaration* affirms ESD as a 'vital means of implementation for sustainable development' and as 'an enabler for sustainable development'

(UNESCO, 2014c). WCESD participants were apparently in ‘clear agreement’ on the important role of ESD in contributing to sustainable development (Lotz-Sisitka, 2015: 7). That ‘agreement’, however, again appears to have been built upon the cosy but highly questionable assumption that everyone was reading from the same page regarding what ‘sustainable development’ connotes. As with the SDG process, the contested nature of the term was by and large ignored. Applying words from a commentary on the World Summit on Sustainable Development of 2002, it was ‘as if engaging in this discussion could potentially ruin the “whole idea” and slow down its world-wide implementation’ (Jickling & Wals, 2008: 6)

Uncritical acceptance of economic growth within the articulation of education for sustainable development inevitably builds incompatibilities and irreconcilables into WCESD outcomes. The *Declaration* stresses, for instance, that ESD ‘is an opportunity and a responsibility that should engage both developed and developing countries in intensifying efforts for poverty eradication, reduction of inequalities, environmental protection and economic growth’ (UNESCO, 2014c). This wraps together mutually contradictory aims in that the ‘neoliberal economic medicine’ in pursuit of economic growth (McCloskey, 2014), a cocktail of ‘privatization of the public sphere, deregulation of the corporate sector, and lower corporate taxation, paid for with cuts in public spending’ (Klein, 2014: 19) has, if anything, deepened structural poverty, exacerbated inequalities and undermined environmental protection. This makes exceedingly problematic the WCESD assertion that ESD should be integrated with, on the one hand, pro-social and pro-environmental SDGs – such as those on poverty reduction, nutrition; health and wellbeing; gender equality and empowerment; biodiversity and ecosystems and oceans and seas – while also calling for links between ESD and the economic growth SDGs. Likewise, linking ESD with SDG 13 on climate change, while also linking it with the economic growth SDGs makes for irreconcilable bedfellows, for, as Naomi Klein (2014: 19) puts it: ‘market fundamentalism has, from the very first moments, systematically sabotaged our collective response to climate change, a threat that came knocking on the door just as the ideology was reaching its zenith’. In this light, the suggested

ESD contribution to ‘processes of transitioning to green economies and societies’ (Lotz-Sisitka, 2015: 8) is likely to be appropriated for purposes of green washing in aid of the neoliberal agenda unless the economic growth ideology and its structural injustices and environmental impacts are also addressed head-on.

The blandness infusing WCESD stretches to the concept of educating for ‘global citizenship’, a term appearing in both the *Declaration* and *Global Action Programme*. In the *GAP*, global citizens are described as ‘those who engage and assume active roles both locally and globally to face and to resolve global challenges and ultimately to become proactive contributors to creating a more just, peaceful, tolerant, inclusive, secure and sustainable world’ (UNESCO, 2014d). Fair enough, but can critical and creative proactivity ever be realised without laying the drivers behind ‘global challenges’ fairly and squarely on the table? And does the idea of ‘global citizenship’ water down the fundamental importance of place-rooted local and bioregional responses to climate change and other issues? Unless flesh is put on the idea of ‘acting globally’ by unpacking the nature of the nexus between local/immediate learning and engagement and global concern and solidarity, it remains a rather nebulous aspiration offering what has been described as a ‘placebo’, ‘band aid’ or ‘soft’ response to global injustice (Bryan, 2015: 199), Pollyannaish in texture.

The *Declaration* makes only passing reference to climate change and omits mention of climate change education (UNESCO, 2014c). According to the WCESD programme (UNESCO, 2014e), only one workshop (out of thirty-four) had a climate change theme while two side events (out of twenty-five) addressed climate change-oriented topics. Although the *GAP* (UNESCO, 2014d) acknowledges climate change impacts on the most vulnerable groups (i.e. girls and women, Small Island Developing States, Africa), the idea of climate justice education is nowhere articulated. Such climate-lite treatment conveys both an explicit and implicit message that climate change is neither urgent nor core to ESD.

Milestone 2: UNFCCC Conference, Lima, Peru [December 2014]

A month later, in the early hours of 14 December 2014 exhausted delegates from the 195 countries represented at the tenth meeting of COP, Lima, Peru, agreed to the *Lima Call for Climate Action*. The meeting had gone on for some thirty-two hours longer than scheduled, itself an indication of the deep and unresolved divisions and tensions between developed and developing nations on climate change, as was the dearth of clean, easily assimilable outcomes in the final text. The *Call for Climate Action* ‘would have put Thomas Jefferson to sleep ... It is both mincing and dense’ (Kessler, 2014). The remit of the meeting had been to provide clean direction so as to better enable the next UNFCCC conference, the planned December 2015 Paris conference, to deliver a legally binding, comprehensive climate change agreement that would come into effect in 2020, a target originally laid down by the 2011 UNFCCC meeting held in Durban, South Africa (UNFCCC, 2011).

It had been anticipated that the bilateral climate change pact by China and the US announced just before the Lima conference and committing both countries to converting to low carbon economies would galvanise delegates and loosen entrenched positions but the ‘sclerotic UN climate negotiating system, which (had) now run for twenty-two years with little concrete result, rapidly reasserted itself’ (Lean, 2014). In consequence, the best that was achieved was a series of watered-down agreements and half-baked or deferred decisions. In a significant breakthrough, it was agreed that both developed and developing countries would make pledges – ‘intended nationally determined contributions’ or INDCs - on the extent to which they would control greenhouse gas emissions beyond their existing plans. But this concession by developing countries was only gained at the cost of transparency in that the obligation to pledge was limited to those ‘ready to do so’ and was weakened still further by the *Call for Climate Action* failing to lay down ground rules for pledges and by making optional the provision of ‘quantifiable information’ and time frames for implementation. Any ready basis for comparability was thus undermined. A synthesis assessment of whether the national pledges, taken together, would be sufficient to keep the

world within the agreed 2⁰C rise in pre-industrial surface temperatures was, bizarrely, scheduled for release a mere month before the Paris conference (UNFCCC, 2014a).

Longstanding deep divisions between developed and developing countries over climate justice reasserted themselves with a vengeance in Lima. Essentially the developing countries, the most vulnerable and most severely affected by climate change, were looking for finance in support of climate change adaptation from the rich countries, the historic CO₂ polluters, not least given their acceptance of the INDC process. The rich countries, in post-recession austerity mood, collectively pledged as little as US\$10 billion to a new Green Climate Fund, even in the light of economists' advice that helping developing countries pursue lower carbon development tracks and so become more resilient would be a sound long-term investment (Carbon Brief, 2014; Kessler, 2014). This in turn led to developing country intransigence on INDC pledge transparency.

As Harjeet Singh of Action Aid International put it:

“We came to Lima hoping that these negotiations would finally deliver what’s needed to help poor people adapt to the effects of climate change. These hopes were in vain. As the Peruvian glaciers melt, and farmers around the world face dry rivers and warmer temperatures, the need for support could not be clearer. Yet the demand for adaptation and finance has been repeatedly ducked. It’s as if the world has already forgotten that climate change is already causing unprecedented loss and damage” (Leach & Evrenos, 2015).

To this we might add the startling failure not just at Lima but throughout the long UNFCCC process to significantly pull back the curtain on the prevailing neoliberal economic model and its culpability in fomenting rampant consumerist excess in the global North, structural poverty in the global South as well as runaway climate change.

Education was addressed at Lima in the shape of *The Lima Ministerial Declaration on Education and Awareness-raising* (UNFCCC, 2014b) issued by ministers and heads of delegation attending the conference. The *Declaration* has about it an unremitting business-as-usual blandness. It recognises that ‘education and public awareness programmes should promote the changes in lifestyle, attitudes and behavior needed to foster sustainable development and climate protection and to prepare our societies to adapt to the impacts of climate change’. It underlines that public support for ‘transformation is necessary now to avoid more serious consequences in the future’ without in any way indicating the nature and direction of the envisaged transformation. It stresses that education plays a fundamental role in achieving ‘climate-resilient sustainable development’ again without any elucidation. It also encourages all governments to ‘include the issue of climate change in curricula’ but holds back from giving any notion of what that might mean in practice (what ‘issue’ in particular? which subjects? which grades? how frequently? how systematically?). It finally calls for a re-emphasis on the importance of education in the global agreement to be forged in Paris in December 2015.

In our more naïve earlier days, we were always happy to welcome the legitimization that such bald statements from on high brought to our radical change efforts. We wonder now whether all they do is provide educational jurisdictions with a get-out clause allowing them to put up a smokescreen of token response that deflates the prospect of transformative educational change. While it is clear that too much depth and detail cannot be expected of outcomes from an international gathering of representatives of different states and divergent educational cultures and systems, we ask ourselves, too, whether the Lima outcome is symptomatic of the ‘de-clawing’ process of which Bryan (2015: 195-197) writes in which topics of radical moment are skillfully appropriated and depoliticised by the forces of neoliberalism and so neutered and made ‘respectable’.

The *Lima Call for Climate Action*, it has been noted (Stavins, 2014), covers four pages while its annex constitutes thirty-seven pages of options

tabled for further deliberation in Paris in December 2015! With a world set on course to dangerously exceed a 2⁰C rise in surface temperatures, Lima provides a study in prevarication and deferral, of Nero fiddling while Rome burns.

Milestone 3: Third World Conference on Disaster Risk Reduction, Sendai, Japan [March 2015]

Against a backcloth of quickening incidence and increasing severity of disasters globally, representatives of 168 governments met at the World Conference on Disaster Risk Reduction in Kobe, Japan in 2005. There they adopted the *Hyogo Framework for Action (HFA) 2005-2015*. Sub-titled *Building the Resilience of Nations and Communities*, HFA laid out a strategic and systematic approach to reducing risk from natural hazard. While each of five identified priorities carried implications for the education sector, it is HFA Priority 3 that had most direct relevance for education in its call to national and local jurisdictions to ‘use knowledge, innovation and education to build a culture of safety and resilience’ (UNISDR, 2005). It is HFA Priority 3 that led to participating countries agreeing to integrate disaster risk reduction learning into school curricula by 2015 (UNISDR, 2009; 2011).

In 2011 the UN General Assembly called upon the United Nations Office for Disaster Risk Reduction to orchestrate a process leading to the development of a post-2015, post-Hyogo disaster risk reduction framework (UNISDR, 2015a). The culmination was the holding of the Third World Conference on Disaster Risk Reduction (WCDRR) in March 2015. The Conference adopted the *Sendai Framework for Disaster Risk Reduction 2015-2030* (UNISDR, 2015b). The *Sendai Framework* lays out a number of guiding principles, one of which is that ‘disaster risk reduction is essential to achieve sustainable development’ (ibid: 10). There is throughout the document an appreciation that sustainability and resilience building are positively correlated and sustainability and vulnerability negatively correlated, i.e. that a vulnerable, non-resilient society or community will sooner or later prove unsustainable. The *Framework* also makes clear that climate change is exacerbating the frequency and intensity of disasters and

asserts that ‘more dedicated action needs to be focused on tackling disaster risk drivers’ that include climate change but also, *inter alia*, poverty and inequality, unplanned urbanisation, poor land management, unsustainable use of natural resources and declining ecosystems (ibid: 7).

The *Framework* seeks to build upon the educational impetus of its HFA predecessor. Participating states are enjoined to ‘build a culture of prevention and education on disaster risk’ and there is a strong insistence on child and youth proactive engagement in resilience building. ‘Children and youth are agents of change’, the text says, ‘and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula’ (ibid: 20). States are also called upon ‘to promote the incorporation of disaster risk knowledge, including disaster prevention, mitigation, preparedness, response, recovery and rehabilitation, in formal and non-formal education, as well as civic education at all levels, as well as professional education and training’ (ibid: 11). Education is also seen as having a significant role in ‘Building Back Better’ in actual post-disaster recovery, rehabilitation and reconstruction contexts (ibid: 12).

Some comment. It is noteworthy that, while the Sendai conference and *Framework* make much of linking disaster risk reduction and sustainable development this is not reciprocated in the SDG process or through the Nagoya ESD conference and *Declaration*. In the same way, the Sendai *Framework* makes much of linking climate change and disaster risk while the Lima conference and its *Ministerial Declaration on Education and Awareness-raising* stays silent on the topic. We wonder why? Sendai is altogether firmer in its insistence on ‘coherence across sustainable development and growth, food security, health and safety, climate change and variability, environmental management and disaster risk reduction agendas’ (ibid: 10). It is also firmer about addressing the underlying drivers behind different manifestations of the global condition and in recognising the importance of localism and local action. ‘While the drivers of disaster risk may be local, national, regional or global in scope, disaster risks have local

and specific characteristics that must be understood for the determination of measures to reduce disaster risk' (ibid). We note, however, that the Sendai gathering and outputs duck identifying economic growth as a driver exacerbating the level of risk in the world but, rather, see it as part of the solution.

Milestone 4: The World Education Forum, Incheon, South Korea [May 2015]

The World Education Forum (WEF) held in Incheon, South Korea, from 19 to 22 May 2015 was heralded as one of the most important high-level policy making platforms aimed at informing the post-2015 education agenda as it sought to 'galvanize the education community around a common vision for Education 2030' (UNESCO 2015a: 1). It adopted the *Incheon Declaration*, i.e. *Education 2030: Towards inclusive and equitable quality and lifelong learning for all*, and made an in-principle agreement on an implementation plan, the *Framework for Action* that was to be adjusted according to the outcomes of the UN Special Summit on Sustainable Development in New York in September 2015.

The *Declaration* and *Framework for Action* mark part of a concerted effort to place the global educational agenda within the overall international development framework, rather than keeping educational goals and development goals separate (UNESCO, 2015b).

According to the *Declaration*, the 'new vision for education' is to 'transform lives through education' by 'recognizing the important role of education as a main driver of development' and in the achievement of the Sustainable Development Goals. The vision is inspired by a 'humanistic vision of education and development based on human rights and dignity; social justice; inclusion; protection; cultural, linguistic and ethnic diversity; and shared responsibility and accountability' (UNESCO 2015c, paragraph 5). But in articulating a vision for education for the next fifteen years, the *Declaration* makes no reference to current and future impacts of climate change that will have profound repercussions for society as a whole and for

successive generations of learners during that period. Similarly, the draft *Framework for Action* does not mention climate change as one of the challenges to which the education system ‘must respond’ although it does list economic challenges (e.g. labour market and unemployment), social challenges (e.g. political instability, demographic challenges, persistent poverty and widening inequality, threats to peace and safety) and environmental challenges (e.g. environmental degradation, competition for natural resources) as well as challenges thrown up by technological advances. We have, in short, a ‘common vision for Education 2030’ that is climate change-myopic if not climate change-blind.

We can’t go on meeting like this: how development education can occupy a new landscape

Some 1,100 delegates attended WCESD in Aichi-Nagoya. UNFCCC COP in Lima attracted 6,817 registered participants but, adding registered observers and media personnel, a total of 12,531 persons were in attendance (UNESCO, 2014b). The Sendai disaster risk reduction conference attracted some 6,500 delegates and 900 accredited journalists (WCDRR, 2015). The Incheon World Education Forum had 1,500 participants. According to Rajendra Shende (2015), the Lima event alone exceeded the annual carbon emissions of smaller countries such as Fiji and Malawi. This not inconsiderable contribution to the heating of the planet carried with it what Shende describes as the ‘Columbian Risk’. Christopher Columbus set out in search of ‘East India’ by crossing the Atlantic, arrived at the wrong place but never admitted as much, calling what he had ‘discovered’ the land of the ‘Indians’. In the same way, after Lima and other UNFCCC annual gatherings, climate negotiators ‘continue to declare that they have reached their destination and achieved the objectives of UNFCCC when, in reality, they are always far from it’.

We are suggesting that the picture is even more smoke and mirrors in that self-satisfaction over limited achievement is more than matched by studious avoidance of the elephant in the conference room: the neoliberal economic project, how it is exacerbating, even causing, the confluence of

social and environmental crises we face, and how it is enervating any seriously radical move towards alternative social and environmental relations.

A refreshing moment on the bland and fumbling road to Paris has been the 18 June 2015 publication of Pope Francis' encyclical, *Laudato Si*, with the title *On Care for Our Common Home*. A 'bit like Naomi Klein in a cassock' (Fraser, 2015), the Pope has penned a text of landmark significance roundly addressing issues – including climate change, consumerism, irresponsible development, environmental degradation – that have been largely left untouched in the international discourse we have reviewed. He argues that preserving the climate 'represents one of the principal challenges facing humanity in our day' (Pope Francis, 2015: 25). The current model of development adversely affects the quality of life of most humanity thus showing that 'the growth of the past two centuries has not always led to an integral development' (ibid: 46). International economic/political debate treats the vulnerable 'merely as collateral damage' (ibid: 49). The 'extreme and selective consumerism' of a small part of the world's population needs to be counteracted (ibid: 50). 'The market cannot guarantee integral human development and social inclusion' (ibid: 109). What is needed is 'integral ecology' that sees environmental and social issues as an unbroken whole (ibid: 141). What is needed is a 'new economy, more attentive to ethical principles' (ibid: 189). The environment 'cannot be adequately safeguarded or promoted by market forces' (ibid: 190). Looking at things differently allows us to realise that 'a decrease in the pace of production and consumption can at times give rise to another form of progress and development' (ibid: 191). Reflecting on all of the above, there needs to be 'education for a covenant between humanity and the environment' (ibid: 216-221).

Pope Francis also expresses frustration at how successive World Summits have 'failed to live up to expectations' on the environment through their 'lack of political will' (ibid: 166), something echoed by those who have taken to the streets and/or who are working for social and environmental

transformation at the grassroots level (Leach & Evrenos, 2015). So how, in the circumstances, might the development education sector respond through its education and advocacy policy and practice? Confronted by such complacency in a time of great urgency, how might it reorient the debate and stir the pot?

First, development education can play a pivotal role by bringing fresh frames to bear upon climate change discourse.

Laurence and Alison Matthews (2015: 17) make the point that climate change as brought to gatherings such as UNFCCC is framed in a particular way and this leads to outcomes that never get to the root of the matter. They take as an example a seemingly unexceptional twelve-word statement used as a rationale for gatherings such as Paris 2015: ‘Our response to climate change is to seek international agreements on emissions’. They see the use of ‘response’ as framing climate change as something that is ‘just happening’ and beyond human purview. ‘Staying in the response frame is like rearranging deckchairs on a sinking ship instead of fixing the hole in the hull’. Stopping or limiting climate change would offer a more deeply proactive framing going far beyond climate change adaptation. ‘International’ also seems unexceptional but in framing the issue as one *between* nations rather than arising from and to be addressed within a global system, it opens the way to posturing and bargaining between nations and places greatest weighting on perceptions based on what are seen as political realisms rather than ecological limits.

The focus on ‘emissions’ itself concentrates attention on where emissions take place rather than their ‘upstream’ sources. ‘Wouldn’t it be a historic turning point’, they ask, ‘if the negotiators at Paris listened, ditched the international game-playing, and adopted a single, global, fair and effective upstream system instead?’ The report, *Finding Frames* (Darnton & Kirk, 2011) calls for a reframing of the international development agenda to ensure horizontal dialogue by replacing concepts such as charity, aid, development and communication with words such as justice, partnership, wellbeing and dialogue/conversation. In a similar way, the climate change

development agenda calls for a framing that focuses upon social and economic drivers and their mitigation, climate justice and injustice, climate change avoidance and denial, the ethics and morality of global warming, and its social and economic effects.

Second, development education as a field should more critically engage with hegemonic neoliberal frames and their outworkings and embed that engagement in its education and advocacy.

A leitmotif of this overview of landscapes and milestones on the road to Paris has been that the neoliberal project and its complicity in fomenting poverty, climate change and disaster risk and in otherwise holding back development has evaded scrutiny. This lacuna would seem to be something that development education is well placed to set right but the field has been less than forthcoming in critiquing the neoliberal agenda. John Hilary (2013) bemoans the tendency of British international development NGOs:

“increasingly to distance themselves from any challenges to the power structures or ideologies that cause poverty, inequality and injustice whether at home or in the majority world’ calculating that ‘it is in their interests to work in active collaboration with the powerful – whether G8 governments or transnational corporations – in order to achieve tangible advocacy wins (however illusory) which can then be reported back to supporters as proof of continuing influence.”

As we have noted, Bryan (2015) asks whether development education has been ‘de-clawed’ and stripped of its radical origins, whether it has become complicit in or is in contestation with dominant discourse. Elsewhere (2008) she calls, but largely looks in vain, for ‘emancipatory knowledge’ in the development curriculum; knowledge that engages ‘more deeply and critically with structural causes of poverty’, problematises different forms of development, and promotes otherwise imagining about development. We ourselves (Selby & Kagawa, 2011) have written of development education as having struck a ‘Faustian bargain’ with the

neoliberal agenda. Peadar Kirby (2012) notes the failure of mainstream education – and development education – to rise to the paradigm challenge accompanying the death throes of a model of development predicated upon cheap energy and the ‘ever more intensive emission of greenhouse gases that are changing our climate in ominous ways’.

The formal state sector, Kirby asserts, ‘has been battered into complete subservience to the dominant, neoliberal, commercial paradigm that is the fundamental cause of the crisis’. He might have added that those operating in international arenas conduct themselves as though similarly cowed and deferential! It is time for the development education sector to speak truth to power at all levels, local through global, by naming and interrogating the fundamental drivers of the climate change crisis and working with radical agendas and frameworks for transformation. Kirby makes the very valid observation that a reproduction framing of education, i.e. that it serves the purpose of replicating the dominant culture and development model, which now serves neoliberal purposes, is not a taken-for-granted. Educators can and have in the past successfully challenged dominant orthodoxies whether in challenging hegemonic religiosity with secularism or challenging speculation with scientism. Development education with its Freirean antecedents is well placed to challenge the dominant paradigm.

Third, development education needs to work through and articulate what ‘development’ looks like and connotes in an increasingly climate-challenged world.

One of us (Selby, 2010: 41) has argued that in the face of the multi-dimensional, runaway threat posed by climate change we should concern ourselves with ‘education for sustainable contraction’ rather than ‘education for sustainable development’. ‘If the contraction project is ultimately somewhat successful in mitigating global heating, the concept may eventually morph into the more steady state idea of ‘education for sustainable moderation’ (ibid.). An associated point is picked up by Kirby (2012), when he writes of the ‘generalised instinct’ to respond to the crisis we face as

temporary and with the ‘presumption that things are going to return to a state of continuing improvement before too long’. For those who take the twin challenges of climate change and peak oil seriously, he asserts, ‘what is urgently required is a far deeper paradigm change, to steady-state economy using far lower levels of energy and achieving low-carbon ways of producing and consuming goods and services’. He concludes: ‘Development education is particularly challenged to rethink what development means in this new context and how to expand its horizons and become a space for debate and new thinking’.

What does development education on an inclined plane look like? By confronting this question development educators will be well positioned to lead the way in the multi-level exploration and enactment of alternative socioeconomic futures that is sorely required. In this regard, it will be important to promote child/youth and adult formal, informal and non-formal learning that explores in very concrete ways what no growth, de-growth and steady state economies and styles of living look like in practice. This would align with the aforementioned IPCC call for the ‘exploration of a wide range of socioeconomic futures’. Steady state community projects that include alternative forms of exchange would be a very good thing to orchestrate, as would the facilitation of ideas exchange networks of such projects locally, provincially, nationally and globally.

Fourth, development education can set about challenging the blandness of the international response to climate change and climate change education.

Recognising that international agreements are the product of multiple bilateral and multilateral accommodations and compromises, development educators can look for and exploit avenues and opportunities to loosen the neoliberal stranglehold on what is discussed and determined and to steer decision makers away from the tokenistic in what is proposed. Take, for instance, the *Lima Declaration*, discussed earlier, and its encouragement to governments ‘to include the issue of climate change in curricula’. With the exercise of subtle advocacy and canvassing, it should not be beyond the

bounds of possibility to help secure an acceptable but more muscular statement emerging from Paris, i.e. reading something like: ‘to include climate change in its scientific, social, economic and moral aspects as a crosscutting issue in primary and secondary curricula’. Set against a backdrop of insistent articulation of the climate change threat, international decision makers, all of whom have a local base and constituency, can be influenced. We should not forget that they are not immune to the forces that are leading individuals and groups to the dawning realisation that paradigm shift is both necessary and inevitable.

Fifth, development education needs to take on board a range of new educational initiatives.

Beyond what has already been said about comprehensive climate change education and the need for climate justice education, we suggest having adult and youth and secondary age children critically examine corporate-backed disinformation campaigns, media treatment of climate change, the ‘false balance’ insisted upon by the media (in which *bona fide* scientists are given no more space than paid corporate-backed climate debunkers), and the contents of corporate-sponsored climate change materials that are infiltrating schools (Elshof, 2015). All this can happen under the heading of media literacy education.

We suggest, too, making disaster risk reduction education an important new sub-set of development education and conflating the field with climate change education, as the *Sendai Framework* proposes. Given the immediacy of the climate crisis, we propose giving special weighting to adult, community-based education and advocacy. In times of dire urgency, capacity building of adults for social and environmental justice engagement and leadership can be core to ensuring a future marked by social and environmental justice. In this regard we should not overlook the present, young adult ‘jilted generation’ denied the jobs, housing and pensions that their parents took for granted (Huckle & Wals, 2015: 502). They are lacking – but looking for - a cause and meaning in life and climate change action might offer a galvanising opportunity, bringing positive affirmation.

Sixth, the development education community should strain every sinew to bring its criticisms of UNFCCC climate change directions and proposals to every relevant arena and to every significant player in the few months that remain before Paris 2015.

Development education organisations and networks might hold workshops, roundtables, public meetings and the like and could put social media to good use. Of course, we should also join with those who, fired by intuitive certainty arising from what they notice around them or by scientific or social conviction, are taking to the streets ahead of Paris. In the upcoming months massive marches are planned around the world. If all pressure fails and more 'bland' is the outcome, it will be time post-Paris for redoubled and urgent resistance advocacy and education around alternative goals and visions for a better future.

References

Adams, B & Tobin, K (2014) *Confronting Development: A Critical assessment of the UN's Sustainable Development Goals*, New York: Rosa Luxemburg Stiftung, available: <https://www.globalpolicy.org/home/252-the-millennium-development-goals/52725-confronting-development-a-critical-assessment-of-the-uns-sustainable-development-goals-.html> (accessed 24 September 2015).

Bryan, A (2008) 'Researching, and searching for, international development in the formal curriculum: Towards a post-colonial conceptual framework', *Policy & Practice: A Development Education Review*, Vol. 7, Autumn, pp. 62-79.

Bryan, A (2015) 'Another cog in the anti-politics machine? The de-clawing of development education' in S McCloskey (ed.) *Policy & Practice: A Development Education Review: Tenth Anniversary Edition*, Belfast: Centre for Global Education.

Carbon Brief (2014) *Good COP, bad COP: Winners and Losers at the Lima climate conference*, available: <http://www.carbonbrief.org/blog/2014/12/winners-and-losers-from-the-lima-climate-conference/> (accessed 24 September 2015).

Darnton, A & Kirk, M (2011) *Finding Frames: New ways to engage the public in global poverty*, London: Bond.

Elshof, L (2015) 'Challenging climate "inactivism" and creating critical citizens' in D Selby & F Kagawa (eds.) *Sustainability Frontiers: Critical and Transformative Voices from the Borderlands of Sustainability Education*, Opladen: Barbara Budrich.

Ford, L (2015) 'Sustainable development goals: All you need to know', *The Guardian*, 19 January 2015, available: <http://www.theguardian.com/globaldevelopment/2015/jan/19/sustainable-development-goals-united-nations> (accessed 24 September 2015).

Fraser, G (2015) 'The pope is a bit like Naomi Klein in a cassock', *The Guardian*, 19 June 2015, available: <http://www.theguardian.com/commentisfree/belief/2015/jun/19/pope-francis-bit-like-naomi-klein-cassock> (accessed 24 September 2015).

Hilary, J (2013) 'Putting the politics back in: Radical education and action in the cause of social justice', *Policy & Practice: A Development Education Review*, Vol. 17, Autumn, pp. 9-26.

Hilman, M, Fawcett, T & Rajan, S C (2007) *Suicidal Planet*, New York: St. Martin's Press.

Huckle, J & Wals, A E J (2015) 'The UN Decade of Education for Sustainable Development: Business as usual in the end', *Environmental Education Research*, Vol.21, No.3, pp. 491-505.

IPCC (2013) 'Summary for Policymakers' in *Climate Change 2013: The Physical Science Basis*. Contribution of Working Group 1 to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge: Cambridge University Press, available: https://www.ipcc.ch/pdf/assessmentreport/ar5/wg1/WG1AR5_SPM_FINAL.pdf (accessed 24 September 2015).

IPCC (2014) 'Summary for Policymakers' in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*. Contribution of Working Group II to the Fifth Assessment Report of the IPCC, Cambridge: Cambridge University Press, available: https://ipcc-wg2.gov/AR5/images/uploads/WG2AR5_SPM_FINAL.pdf (accessed 24 September 2015).

Jickling, B & Wals, A E J (2008) 'Globalization and environmental education', *Journal of Curriculum Studies*, Vol. 40, No. 1, pp. 1-21.

Kessler, B (2014) 'Climate talks make some progress, but leave small nations angry', *Concho Valley*, 16 December 2014, available: <http://www.conchovalleyhomepage.com/story-green-right-now/d/story/climate-talks-make-some-progress-but-leave-small-n/42588/BNQpLfCdVEuJGk1KFYrUUg> (accessed 24 September 2015).

Kirby, P (2012) 'Creating new economic paradigms: The role of development education', *Policy & Practice: A Development Education Review*, Vol. 14, Spring, pp. 19-32.

Klein, N (2014) *This Changes Everything: Capitalism vs. The Climate*, London: Allen Lane.

Leach, A & Evrenos, M (2015) 'UN climate change talks: What do NGOs think about the Lima Accord?', *Guardian*, 15 December 2015, available: <http://www.theguardian.com/global-development-professionals-network/live/2014/dec/15/un-climate-change-talks-ngos-developing-countries-lima-accords> (accessed 24 September 2015).

Lean, G (2014) 'How the Lima climate change talks failed', *Telegraph*, 15 December 2014, available: <http://www.telegraph.co.uk/news/earth/11293478/How-the-Lima-climate-change-talks-failed.html> (accessed 24 September 2015).

Lewis, S (2005) *Race Against Time*, Toronto: Anansi.

Lotz-Sisitka, H (2015) *UNESCO World Conference on Education for Sustainable Development Conference Report by the General Rapporteur*, available: <http://unesdoc.unesco.org/images/0023/002328/232888e.pdf> (accessed 24 September 2015).

Matenga, C R (2015) 'Meaningful development goals and Sub-Saharan Africa' in G McCann and S McCloskey (eds.) *From the Local to the Global: Key Issues in Development Studies*, London: Pluto Press.

Matthews, L & A (2015) 'Framing the climate talks: A guide for grown-ups', *Resurgence & Ecologist*, Vol. 292, September/October, pp. 16-17.

McCann, G (2015) 'Conclusion: Neoliberal decline and international development post-2015' in G McCann and S McCloskey (eds.) *From the Local to the Global: Key Issues in Development Studies*, London: Pluto Press.

McCloskey, S (2015) 'From MDGs to SDGs: We need a critical awakening to succeed', *Policy & Practice. A Development Education Review*, Vol. 20, Spring, pp. 186-194.

Monbiot, G (2012) 'If children lose contact with nature they won't fight for it', *The Guardian*, 19 November 2012, available: <http://www.theguardian.com/commentisfree/2012/nov/19/children-lose-contact-with-nature> (accessed 17 September 2015).

Oates, M (2015) *In Pursuit of Butterflies: A fifty-year affair*, London: Bloomsbury.

Pope Francis (2015) *Laudato Si: On Care for Our Common Home*, available: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html (accessed 24 September 2015).

Selby, D (2010) 'Go, Go, Go, Said the Bird: Sustainability-related education in interesting times' in F Kagawa & D Selby (eds.) *Education and Climate Change: Living and Learning in Interesting Times*, New York: Routledge.

Selby, D (2015a) 'Climate Change: Reorienting the development agenda' in G McCann and S McCloskey (eds.) *From the Local to the Global: Key Issues in Development Studies*, London: Pluto Press.

Selby, D (2015b) 'Thoughts from a darkened corner: Transformative learning for the gathering storm' in D Selby & F Kagawa (eds.) *Sustainability Frontiers: Critical and Transformative Voices from the Borderlands of Sustainability Education*, Opladen: Barbara Budrich.

Selby, D (2015c) 'Climate Justice, Education for Sustainable Development and the New National Strategy', DICE Seminar, 27 January 2015, available: https://www.spd.dcu.ie/site/teaching_today/documents/DICESeminar27Jan2015.pdf (accessed 24 September 2015).

Selby, D & Kagawa, F (2011a) 'Unleashing blessed unrest as the heating happens', *Green Teacher*, Vol. 94, pp. 3-15.

Selby, D & Kagawa, F (2011b) 'Development education and education for sustainable development: Are they striking a Faustian bargain', *Policy & Practice: A Development Education Review*, Vol. 12, Spring, pp. 15-31.

Shende, R (2015) 'From Lima to Paris – Year Long Raucous Journey Back to Europe', 5 January 2015, <http://rajendrashende.com/from-lima-to-paris-year-long-raucous-journey-back-to-europe/> (accessed 24 September 2015).

Stavins, R (2014) 'Assessing the Outcome of the Lima Climate Talks', *A Blog by Robert Stavins*, 14 December 2014, available: <http://www.robertstavinsblog.org/2014/12/14/assessing-the-outcome-of-the-lima-climate-talks/> (accessed 24 September 2015).

Sustainable Development Knowledge Platform (2014) *Open Working Group proposal for Sustainable Development Goals*, available: <https://sustainabledevelopment.un.org/focussdgs.html> (accessed 24 September 2015).

UNESCO (2010) *UNESCO Strategies for the Second Half of the United Nations Decade of Education for Sustainable Development*, Paris, UNESCO, available: <http://unesdoc.unesco.org/images/0021/002154/215466e.pdf> (accessed 24 September 2015).

UNESCO (2014a) *Sustainable Development Begins with Education: How education can contribute to the proposed post-2015 goals*, Paris UNESCO, available: <http://unesdoc.unesco.org/images/0023/002305/230508e.pdf> (accessed 24 September 2015).

UNESCO (2014b) 'World Conference on Education for Sustainable Development opens in Aichi-Nagoya, Japan', available: <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/dynamic-content-single-view/news/world-conference-on-education-for-sustainable-development-opens-in-aichi-nagoya-japan/#.VbaR-rXbJjo> (accessed 24 September 2015).

UNESCO (2014c) *Aichi-Nagoya Declaration on Education for Sustainable Development*, available: <http://unesdoc.unesco.org/images/0023/002310/231074e.pdf> (accessed 24 September 2015).

UNESCO (2014d) *Roadmap for Implementation for Global Action Programme on Education for Sustainable Development*, available: <http://unesdoc.unesco.org/images/0023/002305/230514e.pdf#search='UNESCO+Roadmap+GAP+ESD'> (accessed 24 September 2015).

UNESCO (2014e) *UNESCO World Conference on Education for Sustainable Development, 10-12 November 2014, Aichi-Nagoya, Japan: Draft programme*, available: <http://unesdoc.unesco.org/images/0023/002306/230613e.pdf> (accessed 24 September 2015).

UNESCO (2015a) *World Education Forum 2015: Program 2015*, available: <http://unesdoc.unesco.org/images/0023/002332/233245E.pdf> (accessed 24 September 2015).

UNESCO (2015b) *Framework for Action. Education 2030: Towards inclusive and equitable quality education and lifelong learning for all (Draft)*, available: <https://en.unesco.org/world-education-forum-2015/resources/wef-documents> (accessed 24 September 2015).

UNESCO (2015c) *Incheon Declaration: Education 2030: Towards inclusive and equitable quality education and lifelong learning for all*, available: <https://en.unesco.org/world-education-forum-2015/incheon-declaration> (accessed 24 September 2015).

UNESCO/UNEP (2011) *Climate Change Starter's Guidebook: An issues guide for education planners and practitioners*, Paris: UNESCO/UNEP.

UNFCCC (2011) *Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action*, available: <http://unfccc.int/resource/docs/2011/cop17/eng/l10.pdf> (accessed 24 September 2015).

UNFCCC (2014a) *Lima call for climate action*, available: https://unfccc.int/files/meetings/lima_dec_2014/application/pdf/auv_cop20_lima_call_for_climate_action.pdf (accessed 24 September 2015).

UNFCCC (2014b) *The Lima Declaration on Education and Awareness-raising*, available: <http://unfccc.int/resource/docs/2014/cop20/eng/l01r01.pdf> (accessed 24 September 2015).

UNFCCC (2014c) *Conference of the Parties: Provisional List of Participants*, available: <http://unfccc.int/resource/docs/2014/cop20/eng/misc01p01.pdf#search='UNFCCC+December+2014+Lima+total+number+of+participants> (accessed 24 September 2015).

UNISDR (2005) *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*, available: <http://www.unisdr.org/we/inform/publications/1037> (accessed 24 September 2015).

UNISDR (2009) *Outcome Document: Chair's Summary of the Second Session of the Global Platform for Disaster Risk Reduction*, available: <http://www.unisdr.org/we/inform/publications/10750> (accessed 24 September 2015).

UNISDR (2011) *Chair's Summary: Third Session of the Global Platform for Disaster Risk Reduction and World Reconstruction Conference*, available: <http://www.unisdr.org/we/inform/publications/19947> (accessed 24 September 2015).

UNISDR (2015a) *The World Conference: A Milestone in Disaster Risk Reduction*, available: <http://www.unisdr.org/we/coordinate/wcdrr> (accessed 24 September 2015).

UNISDR (2015b) *Sendai Framework for Disaster Risk Reduction 2015-2030*, available: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf (accessed 24 September 2015).

WCDRR (2015) *WCDRR World Conference Wrap Up*, available: <http://www.wcdrr.org/resources/announcements> (accessed 24 September 2015).

Fumiyo Kagawa is Research Director and **David Selby** Founding Director of Sustainability Frontiers, a not-for-profit international organisation based in the United Kingdom and Canada. Their most recent publications include a *Disaster Risk*

Reduction Education Toolkit for the Caribbean Disaster Emergency Management Agency (CDEMA, 2015), *Sustainability Frontiers: Critical and Transformative Voices from the Borderlands of Sustainability Education* (Budrich, 2015), *Child-Friendly Schooling for Peacebuilding* (UNICEF, 2014) and *Towards a Learning Culture of Safety and Resilience* (UNESCO/UNICEF, 2014). Their teacher education program, *Climate Change in the Classroom* (UNESCO, 2013) is being used around the world. Fumiyo and David are Associate Lecturers at the Centre for Human Rights and Citizenship Education, St. Patrick's College, Drumcondra, Dublin. David is also Adjunct Professor in the Faculty of Education, Mount St Vincent University, Halifax, Nova Scotia, Canada. <http://sustainabilityfrontiers.org>.