



Foreign, Commonwealth
& Development Office



Wilton Park



Report

**Learning Climate: Forging shared solutions on
education, environment and climate change**

Wednesday 8 – Friday 10 June 2022 | WP2047

In association with:





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In association with the UK's Foreign, Commonwealth & Development Office and Global Partnership for Education (GPE)

Executive summary

- Lower income countries are facing a dual climate crisis and learning crisis. All education efforts are likely to fall short or be reversed unless current and future climate change impacts are urgently addressed. At the same time, education is a lower-profiled but critical pillar of climate action.
- Too often the climate crisis and the learning crisis are viewed and treated in isolation. Seriously tackling both crises requires deeper understanding of their inter-linkages, interdependences and both coalescing and competing priorities as well as the determination of shared solutions. 'The fate of our children and our planet are one and the same.'¹
- A siloed approach that treats the education and climate crises as discrete and distinct phenomena is therefore inadequate – and more integrated, multi-sectorial, contextualised and locally driven approaches to tackle both crises are urgently required. The challenges are immense – from a dearth of techniques and resources to make school buildings more climate resilient and environmentally sustainable; insufficient understanding of how best to integrate climate change considerations in school curricula; lack of relevant and reliable data for policy making, and inadequate financing for recovery efforts.
- On the other hand, some low-income countries are pioneering good practice, drawing on proven strategies for disaster risk reduction and resilience, education for sustainable development, green infrastructure, community engagement and national adaptation planning and financing processes.
- Children and young people are key stakeholder groups and their participation and capacity building are integral in responding to climate change threats through education.
- Schools could become important centres for resilience building and the promotion of more sustainable eco-system practices, working closely with local communities and empowering students to take positive action.
- There is therefore significant value in exploring and articulating a more holistic and cross-sectorial framework to bring together the diverse components of a climate-smart education system.
- There is also an imperative to help ensure that education is given more priority in

¹ Vicky Ford, Minister for Africa, Latin America and the Caribbean, Foreign, Commonwealth and Development Office (FCDO), United Kingdom.

climate change debate, so harnessing potential to unlock a significant amount of climate funding for the education sector. It is vital to make a strong case for climate action in the sector by articulating complementary benefits for both quality education and climate action.

Participants of the Learning Climate event were galvanized around a common agenda for action to:

- Build on Wilton Park dialogues to develop a climate smart education framework that can guide future efforts to address climate change in and through education.
- Develop a GPE Strategic Capability Partnership to formalise a coalition of support and resources for governments facing these challenges.
- Advocate for education's importance in climate policies and plans, and secure funding for addressing climate change in and through education from climate funds.
- Explore accessing Green Climate Fund and other adaptation financing for climate resilient education systems, starting in Malawi.
- Build momentum to raise the importance of education in the climate agenda, including at COP 27 in Egypt.

Introduction

Context: the climate and education nexus

1. Global development debates, needs, and resources are being re-shaped by the urgent threat of climate change and associated environmental degradation. Low-income countries are some of the hardest hit, and the populations most exposed to these impacts are the most vulnerable, especially girls and women. Increasing extreme weather events are disrupting the education of nearly 40 million children each year. Climate shocks and slower onset environmental changes also negatively affect the cognitive development and learning of children. 'The fate of our children and our planet are one and the same.'² At the same time the education sector can play a critical role in empowering children, young people and their communities to reduce vulnerability, adapt to the rapidly changing environment and prepare for the transition to greener livelihoods and economies. The scale and urgency of the climate crisis calls for profound transformation in our behaviours, our mind-sets and our social, cultural and economic systems. The education sector can and should play a key role in such individual and collective transformation. While climate change mitigation and adaptation discussions tend to be focused on physical and financial capital, human capital is the greatest resource.

Aim and objectives

2. The overall aim of the Wilton Park round table conference was to prepare education systems to better withstand climate change impacts and develop climate-smart populations by mobilizing cross-sector partnerships behind a common framework for climate action in and through education.
3. 47 participants from 17 countries were brought together for the conference from both the education and climate change/environment fields to:
 - Convene country partners to develop a shared understanding of national challenges, priorities, contexts and needs as they work to build climate-smart education systems.
 - Identify key elements of 'climate smart' education systems so as to inform shared priorities for action, alongside interrogation of the best available evidence.
 - Establish a multi-sector coalition to develop and implement a plan of action to support country partners in mitigating climate impacts on education and advancing

² Ibid

opportunities for climate action through education.

4. Four documents drawing from available evidence were made available as pre-readings for the conference. They consisted of three background briefs (i.e. green and resilient system reform; green and resilient infrastructure; curriculum, pedagogy and assessment) and a briefing paper focusing on a working definition of a climate-smart education system.

Climate change impacts on education

5. Low-income countries face multiple challenges in taking on board resilient and climate-smart education systems not least because they are already on the frontline of the climate crisis with limited resources and capacities to respond.
 - In Malawi the education sector's challenges include: a low primary education completion rate; 85 per cent of secondary level children being out of school with only 1 per cent enrolled in tertiary education; long travel/walking distances for children who are feeling hungry; lack of safe school buildings and basic learning facilities and materials; insufficient teacher numbers and capacity leading to poor pupil-teacher ratios and substandard education. Existing education sector vulnerability has been compounded by climate change-induced extreme weather events and the COVID-19 pandemic. Recovering from a natural disaster is extremely challenging as teachers and students can lose everything. A high population growth rate (3% per year) also poses an additional pressure on an education system that struggles to maintain the current level of education access and quality.
 - In the Caribbean region, climate change-induced hazards and shocks have already had multifaceted impacts on the education sector. Those impacts include significant damage to school infrastructure, disruption of education continuity due to the use of schools as shelters, an unfavourable learning environment owing to increasing heat and water shortages. Schools in the region have successfully implemented a school-feeding program for some 20 years. However, climate change-induced food insecurity means schools struggle to provide nutritious school meals for students.
 - Children, especially girls, are disproportionately affected by the climate crisis. Four out of five of those forced to leave their homes on account of the effects of climate change are female, with women and girls much more likely to die from extreme weather events. Approximately 200 million adolescent girls live on the frontlines of the climate crisis.

Developing a framework for climate-smart education systems: Key issues and themes

6. During the three days of dialogue a number of recurring issues and themes surfaced in relation to the development of a framework for climate-smart education systems.

Systems thinking/approach

- Both education and climate change/environment sectors must avoid a siloed approach and need to work together using a systems-thinking approach to enhance policy coherence and coordination and to achieve scalable impact. It is critical to link both education and climate outcomes theoretically and practically as much as possible.
- There is a danger in overemphasising the specifics of climate change. 'Climate' is not the only challenge faced by the education sector in low-income countries. Other challenges include: conflict, food insecurity, gender inequality, learning poverty, to name a few. It is important to identify the confluence between various risks and crises, including climate under a multi-hazard approach to resilience in order to achieve effective and transformative change.
- Education should be seen as foundational to all the Sustainable Development Goals, including responding to climate change.
- There exist frameworks, approaches and initiatives that carry relevance for

addressing climate change impacts in the education sector. Integrating and drawing upon existing strengths and good practice is important in developing a climate-smart education systems framework.

- Key questions to address include: what are common issues we are trying to solve from across the education and climate change and environmental sectors; how (conceptually and in terms of processes and infrastructures) do we bring them together?

Contextualization, culturally appropriate and locally led approaches

- Climate change impacts are different from country to country and also within countries. Urban, peri-urban and rural areas face distinct climate change-related risks and challenges, which are further differentiated by their location within the variations across sub-regional environments and eco-systems. Different cultures also deal with climate change differently.
- Any interventions should ensure relevance and applicability to specific national and local contexts. Locally led approaches should reflect unique local contexts including resource availability and capacity, past experiences, situation-sensitive and culturally appropriate pathways to address the climate change threats. Locally led and contextualised approaches are vital for building long-term national capacity and addressing the needs on the ground.
- More tools and contextualised approaches are required to ensure access to education and to realise the full potential of every child in a changing climate.
- Indigenous knowledge systems play an important role in developing and implementing locally-led and culturally relevant education responses to climate change.

Child and youth engagement and agency

- There is emerging evidence that children and young people can and do play an active role in reducing risks and building resilience in the face of climate change.
- It is important not to conflate children and young people. They are not a homogeneous group and they have distinctive and diverse needs, perspectives and capacities.
- Active participation by children and youth is vital in the process of developing and contextualising climate change education and action. Youth participants in the Wilton Park conference highlighted the keen interest among young people in being involved in policy and decision-making processes.
- Those who are most marginalised are not always represented in the youth climate movement, and such issues surrounding privilege also need to be addressed.
- Emerging evidence indicate that education for girls is considered by some proponents to be the most cost effective and best investment against climate change. Existing girls' education and gender transformative education efforts should be tapped into in order to enhance agency among girls.

Climate justice

- Climate-smart education systems should consider those who are most affected by the climate crisis and who, in most cases are the least culpable. It is important to bring intersectional dimensions, perspectives and implications into climate discussions, including consideration of gender, racial constructs and colonial histories.
- Marginalized communities (e.g. indigenous communities in Brazil) face language barriers when making their voice heard in decision-making processes that affect them. There should be processes, modalities and mechanisms through which ethno-

linguistic minorities can ensure their voices are heard.

- Young people and community members need to develop the capacity and confidence to demand their rights and hold to account both their government and those who have caused and exacerbated the climate crisis.

The building blocks of climate-smart education systems

7. Current gaps/challenges as well as emerging opportunities were discussed around different aspects of climate-smart education systems.

Infrastructure and learning environment

8. Although education infrastructures are increasingly threatened by climate change, those infrastructures present a potentially clear entry point for climate action. Soft aspects of infrastructure such as community engagement also provide fertile learning opportunities.
 - Damage and destruction of school buildings and facilities caused by climate change-induced disasters have been interrupting education access and learning quality. Student learning is also negatively affected in the uncomfortable learning environments triggered by climate change including increasingly extreme temperatures. Should school communities wish to improve their buildings or facilities, appropriate technologies and resources are not easily available.
 - Schools can demonstrate carbon neutrality by introducing solar roofs and other climate-friendly technologies and practices such as rainwater harvesting, school gardens and reforestation, which can also support learning about sustainable resource management and environmental stewardship.
 - Supporting school infrastructure is a clear entry point for donor investments to make education systems more climate-resilient.
 - Not only dealing with 'hard' elements of school infrastructure, but also addressing 'soft' elements of infrastructure is important. For instance, school/community-level stakeholders can explore the potential use of local materials and local construction knowledge for school buildings while school/community stakeholders can be involved in all stages of school building development (i.e. design, construction and maintenance). What they have learned can be applied to other situations (e.g. home and classroom learning). In this way, school buildings can be vehicles for learning.
 - Considerations of climate-smart school infrastructure development should embrace both physical and digital infrastructure within a blended learning approach.

Curriculum, pedagogies and teachers

9. While integration of climate change into curriculum remains largely limited, it should have a place across the curriculum alongside assessment modalities. Students should be given learning and action opportunities to foster eco-consciousness and capacities. Support for climate change affected teachers should include not only professional development but also support for their livelihoods and mental health.
 - Climate change teaching and learning tend to take place more in non-formal education spaces than those for formal education, though it should also be integrated across all levels of education and curricula.
 - Formal curricula are commonly overcrowded and fail to meet the needs of approximately 70 per cent of students in low and middle-income countries who cannot read by the age of 10. Any curriculum reform needs to keep these realities firmly in view.
 - Further barriers include the fact that curriculum review and reform take a long time and there is a lack of contextually relevant climate change curricula available. There

is also limited evidence to suggest that knowledge transfer alone leads to behavioural change and this applies to climate change knowledge transfer.

- Principles for effective climate curricula could include:
 - While there is a need for technical skills for green jobs, climate change education should not be limited to technical and scientific elements as transferable skills are key.
 - There should be opportunities to develop ecological consciousness and capacities among students. Nature-based teaching and learning is vital in this regard.
 - Climate change curriculum integration should take place across the school curriculum. Climate change curriculum development should be congruent with assessment development and modes of assessment employed.
 - Climate change education curriculum should be made relevant to local needs and there should be more child/youth engagement opportunities using active forms of pedagogies that include experiential and action-oriented teaching and learning.
- Different education sub-sectors (e.g. primary, secondary, tertiary, non-formal education) can each make a distinct curricular contribution; the linkages between sectors should be forged.
- In low-income countries many teachers are repeatedly affected by climate change-induced natural disasters and the affected teachers struggle with meeting their own basic needs (e.g. food, shelter). Support for teachers needs to include professional development (e.g. pedagogies, learning management) but also include support for their livelihoods and mental health. There is the wider and serious issue of teacher shortages, in particular shortages of specific subject teachers. It is important to put teachers at the centre of solutions to climate change alongside students.

School and community linkages

10. Schools can become important centres for nurturing resilience and promoting environmentally sustainable practices by working closely with communities and also empowering students.
 - Schools can fulfil the role of a 'community hub' or 'centre for excellence' for resilience building in the face of the climate crisis by tackling multiple issues. For instance, schools can develop and demonstrate good practice (e.g. introducing climate-smart technologies and infrastructure, planting indigenous trees, student scientists monitoring local environmental indicators) closely working with and disseminating eco-conscious practices and knowledge among communities via students.
 - Schools can also be a natural hub for communities when climate shocks hit (e.g. serving as an evacuation centre, serving as a key nodal point for information exchange). Better planning and preparedness could enhance this role, while minimising disruption to education.

Data and evidence

11. Necessary data to inform education sector policy making concerning climate action are largely lacking. Data analysis, sharing and harmonisation as well as mechanisms to share good practice examples on climate-smart education systems should be significantly improved.
 - There is great need to generate evidence to make a case for climate action in the education sector. In particular, economic impact data of climate change on the education sector is a significant gap.
 - There is also general lack of 'relevant' and 'reliable' data to inform policymaking. Significant advancements in climate forecasting, geospatial technology and data visualization have been made but these are not yet being leveraged fully to inform

education risk planning and management.

- When data are available, they are not necessarily analysed and used for policymaking. Data sharing, access and harmonisation should be improved so policy developed is evidence-based.
- There are some knowledge sharing platforms and mechanisms but they are few and far between. Existing good practice examples concerning climate-smart education systems are not easily accessible.
- One of the significant gaps is absence of cost-benefit analysis concerning climate change and education (e.g. quantifying loss and damage and benefits). The World Bank plans to conduct cost and benefit analysis in relation to climate change across all sectors. Save the Children and World Bank also plan to initiate a series of 'Annual Climate and Finance Watch' papers. The aim is 'to make the economic case for flexible, forecast-based financing to support anticipatory action in education, particularly on the impacts of climate change on education.'

Finance

12. There exists potential to unlock a significant amount of global climate funding for the education sector and to bridge education and climate funding opportunities. Awareness raising and commitment among relevant ministries are vital in mobilising domestic funding for climate action in the education sector.
 - Education should be considered a critical pillar of climate action, and considered as part of national multi-stakeholder dialogue on climate change including National Adaptation Plans and climate financing strategies.
 - It is important to look beyond existing international education funding. There is a huge opportunity for the school sector to unlock capital expenditure funding promised at COP 26 in Glasgow (i.e. 130 trillion dollars for net-zero goals). It is vital to make the case for both education and climate action.
 - The Green Climate Fund (GCF) is the largest global climate fund with a total portfolio commitment of US\$10 billion which could provide an opportunity for funding to make education systems more climate-resilient. While education is not one of GCF's eight strategic result areas it is relevant across all results. GCF is open for partnership in school, tertiary and wider public education initiatives. GCF is country-driven, so it is important to make aware and galvanize local focal points to help integrate education into all interventions. Education stakeholders should be part of the discussion at the national level. GCF supports National Adaptation Plan formulation and other adaptation planning processes that can include education (US\$ 3 million per country one time only). GCF's Readiness Grants (US\$ 1 million per year per country) supports capacity building. Education could be more strongly embedded in GCF programmes in a few 'champion countries' and with the experiences and outcomes used as models for other countries. Malawi and Zimbabwe are possible options, potentially using infrastructure as an entry point.
 - There is increasing interest in investing in climate action in the education sector among donors and multilateral organizations. Major actors include: UNESCO, UNICEF, the Global Partnership for Education (GPE), Education Can't Wait and the World Bank. The World Bank is the largest education financier and all initiatives connected to World Bank grants need to be climate smart.
 - There is an opportunity here to bridge climate and education funding opportunities. For instance, GPE and GCF (and other climate financiers) could explore co-funding possibilities for climate-smart education systems, leveraging GPE's Multiplier grants to incentivize co-financing from green funds.
 - Other funding sources which the education sector can tap into for climate-smart education development include: the Adaptation Fund; social responsibility funds of

global corporations; funding from foundations with a climate change remit.

- It is vital to mobilize national government funding for climate smart education by raising awareness and building commitment across ministries of education, ministries of environment and ministries of finance. A strong case for climate action in the education sector needs to be made in this regard.
- Education financing should prioritise children who are most vulnerable and disadvantaged in light of climate change and their already low education attainment.

Partnership and coordination

13. Multi-sectorial cooperation, coordination and partnership at all levels alongside vertical coordination are key for climate-smart education systems. The education sector should be more prominently represented and engaged in high-level national decision-making platforms on climate action.

- Partnership and collaboration are critical in developing and implementing climate-smart education systems. A ‘whole of society and whole of government approach’ should be employed.
- While coordination mechanisms within the education sector have been well established, it is important to go beyond ‘cosy’ education sector coordination. Cross-sectorial working and learning by bringing education, climate change/environment and other relevant sectors (e.g. health, agriculture) should be promoted. There are a lot of lessons to be learned from suddenly do-able cross-sectorial and coordinated COVID-19 pandemic responses (e.g. cross-sectorial coordination among the Ministry of Education, the Ministry of Health and the Ministry of Finance; coordination between UNESCO, UNICEF and the World Bank).
- Existing high-level national committees and groups on climate change tend to lack the presence and involvement of the education sector. The education sector should be prominently represented on high-level decision-making platforms concerning climate action.
- Vertical coordination at the different levels (e.g. sub-national government, local government, school/community) also needs to be strengthened.
- New partnerships cutting across international and national levels should be pursued.

Education sector response to climate change: some examples

Some examples of education sector responses to climate change were shared and discussed during the conference. Some were directly focused on climate change-specific challenges, while others more broadly respond to a multiple crisis syndrome within which climate change figures predominantly.

Member states in the Organisation of Eastern Caribbean States (OECS)

Both the climate change threat and the COVID-19 pandemic experience have led to the re-conceptualisation of Caribbean education. The new ‘Caribbean School Model’ constitutes a regional approach co-created by the OECS member states and teachers’ unions in the region drawing on all resources. The model envisages a Caribbean school as a better learning space and acknowledges that learning does not take place only at school. The model introduces new student assessment modalities (e.g. assessing group work and internships), addresses teacher capacity development and school-level leadership and focuses on empowerment of parents, among others. Providing preventative psychological support and digital/online learning opportunities for students (e.g. ‘School in a phone’) are part of this model.

Zimbabwe

In the aftermath of the devastating 2019 Cyclone Idai the Ministry of Education, working with its national and regional partners, has been implementing several pilot projects, each offering great potential for scaling up as and when resources can be mobilised.

- The 'Strengthening Community-led Actions on Education and Disaster Preparedness' programme aims at improving disaster preparedness, early response and access to inclusive education in 250 schools in five disaster-prone districts of the country.
- Through the GIGA School Solarisation Project,³ 150 Zimbabwean schools are currently undergoing solarisation of classrooms and teachers' houses. Green/renewable energy is considered to be an enabler for enhancing learning and implementing green projects at school.
- The 'Future Life-Now' sub-regional pilot project involves a collaboration between the Ministry of Education and MIET AFRICA, a partner to the Southern African Development Community. Ten schools are working on climate change initiatives such as school greening projects (e.g. school gardens, renewable energy), 'Youth Climate Dialogues' (i.e. learners sharing their perceptions of climate change impacts on their lives as well as actions they can take to mitigate climate risk) and radio programmes on climate change to raise climate change awareness. This pilot inspires learners to be change agents in their own school communities. The project experience indicates that when given opportunities to lead, young people can come up with innovative ideas and help drive change.
- A conservation-farming project named 'Permaculture' aims at developing green schools that serve as 'demonstration centres for regenerative and transformed food systems.' Through the project, over 100 schools in Zimbabwe established food forests as well as clean water and energy supplies, among others. The project helps students develop eco-consciousness so that they appreciate that the natural environment is inextricably linked and interwoven with human life and understand the importance of using Indigenous Knowledge Systems (IKS) to sustainably manage natural environment.

Southern African countries

A 'Youth Development Model' developed by the Southern Africa Youth Forum (SAYoF) has been implemented across 16 Southern African countries. This is a non-formal education initiative (but making a linkage to schools whenever possible) aimed at empowering youth to address the diverse issues they are most concerned about, which include challenges linked to the climate crisis. This model acknowledges that youth is a diverse group with different needs and, in its implementation, is contextualized through consultations with young people. The use of 'culture' (e.g. drama, arts, music, stories) is part of the pedagogical approach used to actively and effectively engage with youth and wider community members. The model also aims at building youth capacities on relevant technologies for communication and action.

³ GIGA is an international initiative founded by UNICEF and the International Telecommunication Union and aims at connecting every school to the Internet.

Bangladesh

Bangladesh is implementing innovative tertiary level initiatives focusing on locally led and solution-focused climate change adaptation to enhance national capacity using a bottom-up approach. These tertiary level initiatives also support capacity building of school-level children and collaborate with the Ministry of Education in policy making and curriculum development.

- The Independent University in Bangladesh offers a one-year double-major masters programme focusing on climate change and development.
- 50 of the 100 universities in Bangladesh have been brought together to form a 'knowledge hub' to advance locally led and solution-focused climate change adaptation initiatives.
- The Least Developed Countries Universities Consortium on Climate Change (LUCCC) is a South-South collaboration network for building long-term national climate capacity by sharing resources and conducting joint research and teaching programmes. The consortium appreciates different problems and solutions in specific contexts ('not one size fits all'), enabling those contexts to learn from each other about common problems and solutions.

Nicaragua

School nutrition gardens are common and established practice across Nicaraguan schools from early childhood to secondary level. The school garden initiatives have already been integrated in national education policy, key education plans and the school curriculum. Students have been passing on pro-environmental knowledge and practice they have learned through the school garden initiatives to their families and communities. It is noteworthy that established school/family/community linkages through students played a critical role during the COVID-19 pandemic. Nicaraguan schools remained open throughout the pandemic and students transmitted key COVID safety messages to their families and communities. Schools have been centres of information to prevent and roll back the pandemic. Nicaraguan schools also play a key role in ensuring student wellbeing and safety by providing nutritious school meals. Overall, Nicaraguan schools have been working very closely with their communities. Thus school/community partnership is particularly important in bridging awareness and values gaps that often exist between homes/communities and schools.

Conclusion

The conference provided an important cross-sectorial dialogue opportunity that not only explored the interface between education and climate change but also examined entry points for action. The conference participants shared their understandings of the seriousness of the climate change and associated crises - and of the vital importance of more ambitious and urgent action that builds upon existing strengths and opportunities, enhances existing partnerships and forges new ones. The network created through this conference should be kept alive.

Based on the Wilton Park dialogue, participants articulated their commitment to contributing to advancing the climate-smart education agenda. Looking at the immediate future, the UN Transforming Education Summit (September 2022) and COP 27 (November 2022), with their respective formal agendas and side events, are important opportunities to advocate for bold action to address climate change in the education sector, core to which will be ensuring that

the voices of children and youth are insistently heard.

It is critical to develop clear advocacy strategies to secure government buy-in and mobilise resources by making a strong case that good quality education is not only essential in its own right but also beneficial for climate change adaptation and mitigation. Climate-smart education systems need to bring about both education and climate change benefits.

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