



Global Education and Climate Change

Looking at Climate Change Education
through the lens of Global Education

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GLOBAL EDUCATION NETWORK EUROPE

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Content

Introduction	5
Climate Change in Formal Education Systems	6
Climate Change Education and Global Education	7
SDGs and Climate Change	10
Global Social Justice	12
The Positive Pedagogy of Global Education	15
Approaches to Learning	16
Life Skills	18
The Student Climate Strikes	19
Recommendations and Conclusion	21
References	23

Introduction

Educating about climate change has become progressively important in education systems.

Although climate science is complex, it is relatively easy to accommodate the science dimension of climate change education in formal education systems. However, education about climate change is not limited to this; dealing with the political and social dimensions of climate change is also recognised as a very important dimension. This is where educators are faced with many more challenging issues, such as education on dealing with complexity, critical thinking skills, and understanding of global issues and interconnectedness.

Global Education can contribute to education about climate change in regard to how to deal with climate change, by providing a framework for understanding the social aspects of climate change in all of its dimensions. Global Education may also contribute from a methodological perspective: methods that engage learners are proven to be more effective for science and environmental education.

However, when looking at education about climate change through the lens of Global Education, it is imperative to acknowledge that Climate Change Education has become an established field of pedagogy in its own right, with a historical connection to Education for Sustainable Development.

This briefing aims to address how Global Education can contribute to the discourses and practices around education for climate change. It will also look at the benefits of seeing Climate Change Education through the lens of Global Education. There will be a recognition that within Global Education, themes of social justice, importance of a pedagogy of hope, participatory learning approaches and the skills of critical thinking can enrich the traditional approaches to learning about climate change. Finally, the briefing notes the impact of the various movements by young people on the climate emergency, and what can be learnt from these activities for Global Education policies and practices.



Climate Change in Formal Education Systems

Around the world, there are many different ways in which climate change themes are presented within school curricula. Some tend to locate the area within specific subjects such as sciences or geography, while others might try and ensure it as part of the broader ethos and mission of the school. Different approaches will be heavily influenced by dominant local and national practices towards teaching and learning.

But what is evident is that there is a tension between those approaches which emphasise a more fact-based approach which is often linked to the dominant influence of the natural sciences, and those who connect education on climate change more closely to the pedagogical approach of Education for Sustainable Development.

What is suggested in this briefing is that locating discussions on climate change within the context of the Sustainable Development Goals and Global Education can enable the learning to have a broader vision. But there is a need first to understand how Climate Change Education as a pedagogical field has emerged and how it relates to Global Education.


Climate Change Education and Global Education

Whilst climate change has been a feature of themes within Global Education and Education for Sustainable Development for many years, it is only in the past decade or so that Climate Change Education has become established as an independent sub-genre of Education for Sustainable Development, with its own set of definitions, stakeholders and pedagogical approaches (Guilyardi et al, 2018:20). In particular UNESCO has been a driving force in advocating the legitimacy for seeing Climate Change Education as an autonomous pedagogical field. The report from 2015; Not Just Hot Air: Putting Climate Change Education into Practice emphasises how UNESCO is working to mainstream Climate Change Education in national education structures:

"UNESCO's work on Climate Change Education aims to make education a more central part of the international response to climate change. UNESCO is working with national governments to integrate Climate Change Education into national curricula and to develop innovative teaching and learning approaches for doing so." (UNESCO, 2015)

The stakeholders in this development come mainly from the field of Education for Sustainable Development. For example, a recent discussion paper about research on Climate Change Education makes no mention of Global Education but refers frequently to Education for Sustainable Development (Allea, 2020).

There are however several academic papers that recognise the interlinkages between Education for Sustainable Development and Global Education (Scheunpflug and Asbrand, 2006). Another seminal example is from the 'Maastricht Declaration on Global Education' from 2002, which states that 'Global Education is understood to encompass (...) Education for Sustainability.



This follows in large part because climate change is a global phenomenon, with global emissions, global consequences, and global solutions. Therefore, education about climate change has to be global in nature and thus has connections to Global Education. But the natural proximity of Climate Change Education and Global Education can obscure some important differences, which this briefing will explore more in detail.

The stakeholders with traditional ownership of Climate Change Education tend to come from the environmental organisations and the "hard science" sector. This is in contrast to the dominant traditions within Global Education which have strong links with development cooperation organisations, the international community, and social science education (Krause, 2016:149). This poses challenges for Global Education in terms of how and in what ways it contributes to discourses, policies and practices around Climate Change Education.

Whilst Global Education encompasses many different perspectives, there are common underlying themes with Climate Change Education such as a sense of one world humanity, social justice and equity. However, where Global Education has a more "open ended" approach, Climate Change Education can be more "locked" to a concrete change and pre-defined action. The difference between the two can be seen by comparing the Maastricht Global Education Declaration;

"Global Education is education that opens people's eyes and minds to the realities of the world, and awakens them to bring about a world of greater justice, equity and human rights for all." (Maastricht Declaration, 2002)

with a UNESCO definition of Climate Change Education;

"Climate change education is about helping learners understand and address the impacts of global warming today, while at the same time encouraging the change in attitudes and behaviour needed to put our world on a more sustainable path in the future". (UNESCO, 2009)

These two definitions share some of the same language, but they also include significant differences. Where Global Education is about "opening the eyes and minds", Climate Change Education is about "helping learners understand". Where Global Education states an all-encompassing vision for a better world "for all", Climate Change Education is about a need to "put our world on a more sustainable path".

A challenge therefore for proponents of Global Education is how to address this fundamental difference in pedagogical approach and underlying vision at the base of Climate Change Education.

It is suggested here that there are four ways this can be addressed and bridged:

- Climate change directly relates to global social justice as it affects poorer communities disproportionately.
- Promoting a Pedagogy of Hope.
- Importance of pedagogical approaches that pose questions and problems, encourages dialogue and critical thinking and recognising there are a plurality of views and possible solutions.
- And, most notably, using the framework of the Sustainable Development Goals, in particular target 4.7.

SDGs and Climate Change

The Sustainable Development Goals (SDG) have given Global Education a renewed impetus (Black et al, 2019:17). The SDGs are not only an agenda for achieving sustainable development, they also present a coherent framework for understanding how sustainability is connected to everything else, with climate change as a central aspect. SDG 13 is dedicated to climate change, and there is frequent mention of climate change in the founding UN resolution 'Transforming our world: the 2030 Agenda for Sustainable Development'.

For Global Education, framing policies and practices on climate change within the SDGs enables linkages to be made to broader educational goals. What remains a challenge, is that education about climate change is often linked to global events and political high-level meetings, most notably the UN Climate COP system. There is a need for global educationalists to recognise the importance of these events, ensure that any educational initiatives bring in themes of social justice, empower learners and address impact of global inequalities.

The Black Swans of Global Climate Change Politics

Climate change has shown to be a political field liable to 'Black Swans'; unexpected events that were not foreseen, but that will be highly influential.

One such 'Black Swan Event' is under development at the time of writing; the Corona virus pandemic of 2020/2021. It is too early to draw conclusions, but it is clear already that there will be some impact on greenhouse gas emissions and that some countries are making political pledges to “build back better” following the crisis.

The new IPCC Assessment Report launched in 2021 (IPCC, 2021) has been considered a 'Code red' for human driven global heating: it goes further than ever in linking extreme events – such as heatwaves and extreme rainfall – to human induced climate change. It was launched at a time that coincided with a series of extreme climate events, globally and in Europe, causing severe human toll, crop loss and widespread hunger, making it impossible to ignore.

Climate change politics experience high frequency of these kinds of unexpected events. On the one hand, this instability could raise the threshold for Global Education actors to engage with Climate Change Education, as the topic is constantly changing. On the other hand, it is the global nature of climate change politics that causes this instability. At any rate, the Global Education sector will have to learn to live with the frequency of 'Global Black Swans' in the landscape of climate change politics.

Global Social Justice

In Global Education, 'justice' is a key term, along with the strongly related term 'equity'. According to the Maastricht Declaration, Global Education 'awakens [people] to bring about a world of greater justice, equity and human rights for all'.

While 'human rights' is well understood, it is harder to define what 'justice and equity' refer to. The terms relate to visionary and overarching elements such as seeking equity in relations between the 'global south' and the 'global north', or to achieving understanding and change in unjust international trade structures.


In education about climate change, 'justice' and 'equity' are also used, but the terms are associated with current political debates and division, more than joint values. As the IPCC (Allen et al, 2019: 55) puts it:

'Concerns regarding equity have frequently been central to debates around mitigation, adaptation and climate governance. Hence, equity provides a framework for understanding the asymmetries between the distributions of benefits and costs relevant to climate action.'

The same phenomenon has been noted by long-time observers of global climate change politics:

'Developing countries perceive climate change as an injustice: they have not caused the problem, while they endure the most climate impacts and are now being told by others to cut greenhouse gas emissions. Developed countries, on the other hand, are afraid of liability and being held fully responsible for climate change forever. (...) We have been going in circles for decades.' (Lannoo, 2016, quote by Klinsky, S.)

The point here is not that 'justice' or 'equity' are not useful words in understanding the global dimensions of climate change, but that such



central terms have different connotations in Global Education, compared to Climate Change Education.

However, proponents of both Global Education and Climate Change Education seek to facilitate positive change for achieving global sustainable development, where 'justice, equity and human rights' are necessarily core values. Global Education brings in the interconnectedness of these terms, while Climate Change Education brings a legitimate sense of urgency. This call for action and a shared global vision bridges the challenges of language and vocabulary for Global Education and Climate Change Education, and points to how Global Education and Climate Change Education can be mutually reinforcing.

Climate Change and Empowerment of Students

Education on climate change in schools has typically tried to empower students based on three pathways to power:

- **Conscious consumers.** This is perhaps the most frequently identified source of student power, with a focus on environmentally friendly products, buying second-hand, or not buying anything at all.
- **Active citizenship.** Students have power as citizens, and education on climate change within the framework of social science and civic education tends to include active citizenship and political awareness, skills, and democratic participation through pedagogical methodologies. The complexity is bigger with this approach, but so is the potential for impact and empowerment for the individual student.
- **Career Choices.** One route to power that is less frequently addressed, is how students in secondary schools are in the process of choosing career pathways for adult life - either studies or vocational training. As the world demands more sustainable solutions for production of energy, food and goods, career pathways will have to adapt. Students know this and will have to include knowledge from education on climate change in making life choices. As a consequence, schools and higher education will seek to deliver study programs on green careers to meet the demand. This is a 'silent revolution' caused by student power.

These three C's – Consumer, Citizen, Career, can be said to be the three dimensions of student empowerment in Climate Change Education.

The Positive Pedagogy of Global Education

A core value for Global Education is to trigger curiosity for the world, and to foster an open interest in other cultures and different ways of life (Bourn, 2018:165). The importance of avoiding overtly negative messages is a well-known debate in the Global Education field, but it's not only relevant for avoiding depressing messages. The world is not a hopeless and desolate place. A fundamental Global Education perspective is that we as humans connect better with other people when we see them as genuine living equals, and not as negative stereotypes.

Within the proponents of Climate Change Education there has been a tendency to emphasize a negative outlook on the world. A typical narrative has been that we have to change our societies urgently, to avoid extreme climatic upheaval.

Using shocking messages of imminent disaster is an easy route for mobilising attention, but genuine empowerment or ownership of solutions do not necessarily follow. Within Global Education however, there has been an emphasis on how positive messages can engage and empower learners, to show that their own actions can lead to social change. Global Education of high quality leads the learner away from "doom and despair", with the aim of inspiring the learner to support a positive, sustainable and inclusive world view.

This approach has been informed by pedagogical traditions associated with development cooperation and the social sciences in general, with an emphasis on learner empowerment and promotion of terms such as active global citizenship.


While Climate Change Education could be said to focus on the failure of global climate politics, Global Education can deliver an explanation of why the problem of inaction and indifference persists. Global Education can, above all, through its distinctive pedagogical approach provide a framework of education for global social justice and change.

Approaches to Learning

Global Education policies and pedagogical practices have been built upon learning that encourages participatory approaches, critical thinking and analysis, the value of different perspectives and plurality of world views. It is also an approach to learning that recognises complexity, values social justice and encourages, dialogue and self-reflections. Whilst aspects of these approaches can be seen within Education for Sustainable Development, there has been a tendency within the traditions around Climate Change Education to promote learning towards pre-determined goals.

One central value of Global Education is to encourage learners to form their own critical analysis of presented information, and to find their own way forward. This approach contrasts with Climate Change Education, which seeks to 'guide' the learner towards concrete action, typically individual lifestyle changes and relatively minor adaptations for reducing one's own carbon footprint. Global Education on the other hand has always emphasised a more open-ended approach, posing critical questions to established truths. The value of such a critical approach means that the learner is more likely to have a greater sense of ownership of the outcomes of the learning gained, rather than being guided down a pre-determined path. The pedagogical approach of putting the process of learning as the central tenet, is something Global Education could contribute to education about climate change.

This process of learning should also include the importance of promoting a range of voices and perspectives (Andreotti, 2016), to question dominant assumptions and 'the given truth'. Global Education pedagogical approaches can encourage the learner to develop their own thoughts albeit within a framework of social justice. Climate Change Education on the other hand tends to focus on individual behaviour changes, emphasising specific things that can be done. A criticism of this approach could also be that it can lead to a rather shallow approach to learning, unlike Global Education which can provide a deeper process, understanding the complexity of global



issues and genuine respect for diversity of opinion and identity. Global Education invites the learner to reflect on their impact on the world beyond the immediate and individual level, and how we are all interdependent and interconnected (Krause, 2016: 149).

Life Skills

As this briefing has identified, there are a number of key skills from Global Education that are relevant for Climate Change Education. These include dealing with complexity, how to address a range of voices and perspectives and recognising the importance of positive messages that can empower learners to seek social change.

These can all be said to be life skills (Bourn, 2018). As such, these capacities are important elements of Global Education, but also provide important approaches to a holistic education about climate change.

A key life skill that is very relevant here is the ability to handle stress and hopelessness when presented with negative stories of 'doom and gloom' for the world and the general future, as has been mentioned earlier. A second key life skill is media literacy, in particular the capacity to critically access, evaluate and understand media content of all kinds. Media literacy also includes the capacity to produce and present opinions and expressions in public*.

Another key life skill that brings together Global Education and Climate Change Education is how to deal with uncertainty and insecurity. Global Education pedagogy can, through its strong value base around social justice and human rights, provide the learning tools that enables the learners to develop an individual understanding of the issues, and to let learners explore what to do with this knowledge as active citizens.

As a prime example, the Student Climate Strikes of 2019 can be analysed within this line of thinking. The unifying experience of participating in a world-wide positive media event and empowering public demonstrations can be understood as a counterweight to the often negative, pacifying and disempowering message of climate change problems.

**Definition taken from US National Association for Media Literacy Education: <https://namle.net/publications/media-literacy-definitions/>*

The Student Climate Strikes


In March 2019, more than a million school children globally took to the streets in one of the biggest demonstrations by young people in human history. The numbers are uncertain, but several thousand events and happenings were organised in 125 countries. In the following months there were other similar mobilisations, and again in the autumn of 2019 (Wahlström, 2019). Similar mass mobilisations on a global scale were planned for the coming years, but the Corona crisis thwarted many of these plans for 2020.

It is not possible to estimate exactly the impact of the Student Climate Strikes, but it can hardly be overestimated. This goes in particular for the older age groups in schools, at secondary levels. However, before the main demonstrations in March 2019, there was significant scepticism to the Student Climate Strikes among teachers. This was expressed in media comments, and the scepticism seemed centred on the argument that being absent from school is not good for learning, in addition to causing absentee hours for the students.

With the benefit of hindsight, these objections seem rather curious. The Student Climate Strike was not so much students being absent from school, as being present at the demonstrations (Wahlström, 2019:11). It is hard to argue that the missed curriculum sessions were not matched by the education gained from participating in the demonstrations. A distinction between education and curriculum seems relevant to apply here.

Moreover, these demonstrations were overwhelmingly inclusive and positive events, in spite of the frequently gloomy slogans on the posters. All over the world, the demonstrations seem to have been characterised by a sense of getting together for a greater cause. This points to how life skills are an important dimension to include for successful education, a notion that is central in Global Education.

The success of the Student Climate Strikes also highlights how the



traditional understanding of how students learn and what students do with this learning, needs some reconsideration. Informal networks have been created that question the traditional roles that civil society organisations have played. What is also significant about these networks is that they demonstrate the need for learning relevant skills for self-empowerment, which raises the challenge of how formal education can 'teach the future'*. Global Education can present a holistic pedagogical tradition that is relevant for this challenge.

**This term is taken from the web page of the UK Student Climate Network, who was the main organising body behind the UK Student Climate Strikes: <https://ukscn.org/our-demands/>*


Recommendations and Conclusion

Climate change is clearly one of the dominant topics of our time. The various initiatives and movements around climate change demonstrate the urgency of the current situation. There is therefore a similarly urgent need for Global Education to identify and clarify its relationship with Climate Change Education, including how Global Education can be an asset by making a positive contribution.

What Global Education can provide is a broader perspective to the challenges, emphasising the need to include the wider contexts from sustainable development, the relevance of the SDGs and the need to locate any changes within individual behaviour to be built upon a depth of understanding of the issues. It also locates the learning and the learner within a global context.

What Global Education in return needs to consider is the following:

- Developing a language and approach on climate change that maximises the enthusiasm and concern regarding climate change as an opportunity for making positive change, particularly among young people. It could offer an approach that demonstrates that change is possible if it moves beyond the individual towards society.
- Ensuring that learning about climate change brings in approaches that move beyond technical, scientific and behavioural change models.
- The broader movements around Education for Sustainable Development should be recognised as an important contextual framing of Climate Change Education initiatives.
- Putting the voices, concerns and approaches of young people at the forefront of future strategies.
- Encouraging national education for sustainable development strategies as suggested by UNESCO (Leicht et al, 2018: 97) to give increased emphasis to the global dimensions of learning. There is evidence that this can be fruitful for both Global Education and Education for Sustainable Development.



Education about climate change is clearly a major feature of the educational landscape today, and there seems to be an emerging field of Climate Change Education with its own internal characteristics. In moving forward, this pedagogical field needs to encompass more directly political, social, economic and cultural dimensions, the challenge of dealing with complexity, critical thinking skills and the understanding of the globally interconnected world we are living in. It is through Education for Sustainable Development that this field can have a closer relationship to Global Education, through common pedagogical approaches that put the learner at its heart.

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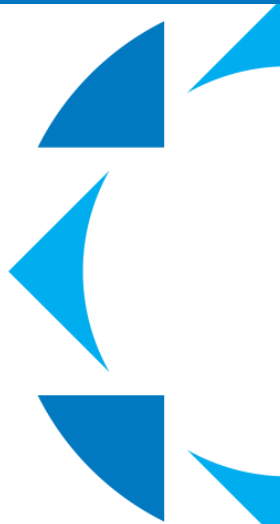
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