

Teaching the ecological gap

The progress and problems with the attempts to fill in gaps of climate and ecology within secondary education.

by Finn Woodhill (Geography Teacher & part of XR Educators).

In the UK our teaching is led by assessment and, while Ofsted are attempting to drift away from this, there will be no change without a dramatic decision from the Department for Education and Ofqual. The piling on of assessment content throughout all secondary school years is the same as stretching over-kneaded dough, immalleable, its ripping, large holes have formed. We need to start from the beginning if we are to avoid further widening gaps in emotional support, knowledge of our natural world, attainment of children from low income families, the treatment of vulnerable children through behaviour policies and in-turn the gap of who is able to thrive in what will be a very different future. This opinion piece serves as a review of where we are at the beginning of 2020 in terms of focus on climate and ecology within education, with a brief longing towards a major upheaval full of the essential ingredients, such as those offered through permaculture. Throughout I share some of the best available resources which aim to fill the gaps right now, because our spent dough is already being put in the oven.

In the UK we have the opportunity to increase our sharing and delivery through the Climate Learning Week being promoted by NEU, UCU and NUS on 10th to 14th February.

In the UK some structural changes are in the works. A new Natural History GCSE is planned from OCR for 2022, after a hard fought campaign which began in 2011, which aims to 'help young people reclaim knowledge lost in recent decades as society has become much more urban, much more indoors' ([inews](#), 2019). The same year Wales will start to implement a new curriculum which gets rid of GCSEs entirely and, if Robert Halfon, Conservative chair of the Education Select Committee, gets his way, then so will England. The single action, of getting rid of a set of assessments which have been redundant since 2015, when the school leaving age was raised to 18, would start to give the required space in teaching hours and a student's capacity for learning as well as being able to process their fear of the future. In the past year, Ofsted have confused schools by becoming less committed to assessments while the Department for Education has not offered any alternative course for schools to follow other than the current year-on-year continuous improvement on performance data tables.

Global gaps

Internationally, Departments for Education are listening. Those in Italy, Finland and New Zealand have made significant shifts in their consideration of climate and ecology education. In November 2019, Italy reached the world's interest as the first country to shout loudly and get headlines about making 'sustainability and climate the centre of the education model' (Education Minister Lorenzo Fioramonti, 2019). It now hangs in the balance as Fioramonti resigned from the government in December due to lack of education funding and not getting through his suggestions of higher taxes on flights and plastics to raise further funds. Hopefully something will still happen, but fortunately there are other leading lights.

Finland may not have made headlines around the world, but they have gone much further. Over the past few years a new curriculum structure was brought in which focuses on the 'joy and meaningfulness of learning and to develop [students'] active agency and sustainable well-being', the structure and content of which has been co-created with students and educators 'in the context of the rapidly changing world' ([Irmela Hanilan, 2018](#)). Since 2014, one of their four pillars of curriculum has been 'understanding the necessity of living sustainably' and educators can see what this might look like through these [excellent translated resources](#). This is the country with currently the world leading net-zero goal of 2035 and, alongside that huge transition, a country which understands how vital education is in supporting young people to be part of that future and to relish in the positive aspects of radical change.

New Zealand has a long history of environmental education and, like Italy in 2019, they announced a new climate curriculum to much fanfare. It touches briefly on the biodiversity crisis but, with agriculture as their biggest industry, the government still faces much criticism and it remains a controversial topic in New Zealand. Aimed at children aged 11 to 14, [their guidance and resources](#) have truly radical elements including encouraging teachers to support student activism because 'children and youth know what is going on and they are upset about it'. Perhaps most importantly there is also fully embedded support to discuss the emotional side of our crisis throughout their planned curriculum. In the UK the social enterprise ThoughtBox have given much consideration to emotion in the fully resourced, and free, '[Changing Climates](#)' curriculum for 5 to 18 year olds, which fits in the available gaps of PSHE and related citizenship lessons. In both cases the deep focus on discussing and processing emotions throughout adds what is so often missed in the delivery of another assembly on climate by a member of senior staff;

emotional support for the masses, other than the most vulnerable, is generally absent throughout our school systems. The work of Caroline Hickman through the Climate Psychology Alliance, in particular their podcasts, as well as the talks of psychotherapist Jo McAndrews, tackle the huge question of how to talk to children about what is happening.

The countries which are making changes are following the UN Sustainable Development Goal 13, which states that we must ‘improve education, awareness-raising and human and institutional capacity on climate change’ and our commitment to the Paris Agreement which demands we do what we can to provide members of the public with climate empowerment. In 2019 XR Educators called on the Department for Education (DfE) to make changes to the curriculum through actions outside their offices. The letters we wrote got the same copy and paste lies which they send to representatives of the highest environmental body in the world which yearly requests that the UK Government fulfill its international commitments to environmental education. In particular the DfE stated that they have included climate change within the primary curriculum, which it most definitely does not (do let me know if you find it, perhaps it is hidden as an acrostic). The same lack of care and consideration is given in their response to a bunch of educators hanging about outside their offices calling for radical change, as is given to the United Nations, this demonstrates quite how far behind the DfE are on their journey in understanding the scale of our situation.

The gap in the purpose of education

Delivery of incidental lessons, assemblies, tutor time and other sessions have been the way in which many of society’s ills have tried to be addressed by schools from relationships to crime. Educational author and Geography teacher Mark Enser puts climate change in this same camp, stating that the curriculum of England and Wales already does a fine job within geography and the sciences, and we should not be trying to cram more in or waste time tinkering with the curriculum (TES, 2019). Enser justifies his argument by, quite correctly, saying that it is those in charge of creating the problem who need to be targeted, and not the children who can play only a small part in solving this emergency within the necessary timeframe. He does, however, miss two vital points: firstly, it is about preparing them for living through a very different future and, secondly, that our education system is inextricably linked to the economic model which is causing the mass extinction of species and risking ours.

This year Ofsted have thrown another shovel load of gap filler into the cracks. This time in the form of character traits. Nothing says character development like my weekly going through powerpoint slides about how to be a better person, featuring topics such as initiative and cooperation. To understand the difference between the wholesale Finnish approach and that of the UK, we can look to their second pillar of curriculum and contrast it with Ofsted's explanation of what they are looking for in terms of character trait development in their new Framework for inspecting schools in England. While both want growth, learning and progress, an English student should 'behave with integrity and cooperate consistently well with others. This gives pupils the qualities they need to flourish in our society' (Ofsted Framework, 2019). In contrast a Finnish student should be able to 'address conflicts ethically and with empathy, and having the courage to stand up for what is good, is important. Becoming educated means that individuals and communities are capable of making decisions based on ethical reflection, empathy and knowledge' ([Irmela Hanilan, 2018](#)). The two key differences are in how we are meant to interact, that the Finnish child should be able to argue about what they believe, and the overall outcome that the English child is formed for *our society* while the Finnish child acts for both themselves and their communities.

The UK does not have a shared goal for *our* future society. Instead, for now, we can map climate and ecology content into the gaps and rethink their meanings, as has been done successfully by many schools with distancing British Values from its racist inception as part of Prevent, but of course this leads to inconsistencies. The content will be delivered often by non-experts, the form tutor or the senior member of staff leading an assembly. The children switch off: they know it is the gap filler to tick a box. Training of teachers is a vital part of moving forward, either through the [online UN platform](#), as part of initial teacher training or through collaborative CPD, but of course all of these are impossible for many of us, due to the biggest issue: there not actually being any gaps in the day of a teacher.

The inequality gap

A criticism levelled at the UK environmental movement is that it is white and/or middle class. This is no more apparent than when popping into your usual school eco-club. This is not a lack of caring from students, from my experience questions and discussions within a classroom environment will come from all students, but instead it is down to those children who have the time to attend in their lunchtimes or after school, and may well be encouraged by parents. This extra-curricular gap filling allows some students to develop a sense of agency, to go beyond the tutor time/assembly activities about the individual choices you can make of 'recycle

more and switch off the lights'. Instead they feel they are making a direct impact to their local environment and are not helpless within the runaway system. This risks creating further gaps, and while a place needs to be created for young people wherever possible, teachers should fight for this to be part of timetabled hours. Global Action Plan put together a framework for supporting activism in schools which highlights the importance of having the support of school leaders so that student ideas can be realised and arguments for supporting this should be given a pupil premium context.

At my school, for the first major school strike in 2019, dozens of students tried to leave. Senior leadership members stood in the way as the children tried to smash the gates open. When a senior leader said to me afterwards 'I don't think that some of them could spell sustainability' - I find this illustrates the problem. A gap in knowledge is definitely not ideal, children ask me in class if the world is going to end in a few years and this comes from a deep misunderstanding, possibly misinformation, but the emotion felt of a lost future is a reality for all students. Schools, as future builders, must respond. If the students had gone to the protest then perhaps they would have learnt many more valuable lessons than the correct spelling, this cannot be a case of some having a stake in this and others being left out.

When returning to school after the Christmas break just gone, there were two topics of conversation which I overheard continuously across the playground and which were directed at me during lessons: the Iran situation and the Australian bush fires. I'd never seen this much engagement with the topic. An assembly on climate change was delivered with ideas for small individual actions, and it washed straight over the students. The overall reality is that if delivered outside of the curriculum then it is unheard apart from by those who have previously had their ears prepped through privilege to listen however dry the delivery. Filling the gaps, however attention grabbing and awesome, does not feature within the memory games of mastery which kids have become accustomed to.

Careers has been a core gap filler in secondary education for over 100 years, long before the other social considerations implemented since New Labour came to power. The future is clearly going to be vastly different to what we tell children when we deliver careers advice. It is perhaps this gap which needs addressing first, to provide alternative views of the future in terms of employment and lifestyles, and within that there is much opportunity for joy and hope but not for what they have been led to expect by media, families or the education system. The issue

which schools face is that the future goals proffered to students are those which are to be achieved through doing well in their exams. To start to discuss living well in a future where mass-consumption and a growing economy are not our cornerstones is to introduce the question 'what's the point of trying to perform well in this test?' For the time being however, students, particularly those who are low attaining in assessments and who come from low income families, need to differentiate themselves through the ratings system within an economy which requires a minimum of a grade 4 in Maths and English.

As students start to further question this future and their place in it, schools can go in two different directions to cope. They can attempt to support pastorally or, as is more often the case, utilise the violence of school sanction systems. The disconnect felt by students of being pushed through assessments while not being able to ground themselves in what is happening to the world will be navigable by some, those with aspiration to be doctors to save lives, coastal engineers to save land or artists to save sanity. Other students will likely react with disengagement or lashing out, and will be punished and further distanced from any form of collaborative, warm and supportive understanding. We must have spaces of honesty and open emotion, students need to be able to engage in the natural world and be given opportunity to have constructive agency within it. To re-word Ofsted, we must help them form the qualities they need to flourish in *their* society, and while we're at it let's pinch the 'truth, goodness, beauty, justice, and peace' from the Finnish statement too.

Beyond gap filling

Permaculture design provides a model for a gapless education system, one which involves the whole of the learner, teacher and their local and wider environment. While all the existing models put emphasis on growing food (understandable with it being one of our most vital resources), it has the potential to cover a wide curriculum and is being taught in countries all around the world including Malawi to East Timor. The book '[Earth Care, People Care and Fair Share in Education](#)' covers the principles and lesson ideas for 3 to 12 year olds and is available to read online for free.

The [Teach the Future](#) campaign aims for our Government to urgently repurpose the education system to focus on the crises, and will try to get a climate emergency education bill through parliament. The unions are switching onto the idea of being pro-environment rather than seeing it as distinct from being pro-worker. [XR Educators](#) will look to grow and involve further educators in taking direct-action,

while also supporting young people and fellow educators to implement changes in their schools.

While much of the gap in education is reflective of society at large, the UK is not so distinct from New Zealand and Finland in terms of its economic model and aims. To attempt to violently control children who are suffering from an ecological disconnect, exacerbated by living into this crisis, rather than finding ways of fully supporting students, is against British Values and the values of humanity at large. The many gaps may be unfillable without removing the year 11 GCSEs (and year 6 SATs) along with other major changes, but all concerned educators will keep trying to fill what we can, and that starts with campaigning at all levels of educational management, sharing resources like this [climate collapse scheme of work](#), carrying out direct-action and supporting each other emotionally so we don't all fall out of the system we are trying to change.

Resources linked throughout document:

Climate Learning Week information:

<https://learningrebellion.earth/climate-learning-week-10th-14th-feb/>

The New Educational Curriculum in Finland, 2018

http://www.allianceforchildhood.eu/files/Improving_the_quality_of_Childhood_Vol_7/QOC%20V7%20CH06%20DEF%20WEB.pdf

Teachers Climate Guide from Finland

<https://teachers-climate-guide.fi>

New Zealand's climate and wellbeing resources

<http://nzcurriculum.tki.org.nz/Curriculum-resources/Education-for-sustainability/Tools-and-resources>

All ages climate, biodiversity and emotion focused resources from ThoughtBox

<https://www.thoughtboxeducation.com/climatecurriculum>

Climate Psychology Alliance podcasts (multiple episodes available)

<https://www.climatepsychologyalliance.org/podcasts/370-3-talking-with-children-about-climate-change>

Jo McAndrews talks recorded on Youtube

<https://www.youtube.com/channel/UCwM59rkNiJJAgxM9vlQJRRg>

Global Action Plan toolkit for schools to support student action

<https://www.globalactionplan.org.uk/news/climate-chaos-response-toolkit-for-schools-is-launched>

Earth Care, People Care and Fair Share in Education

<http://childreninpermaculture.com/document-download-center/>

Teach the Future Campaign

<https://www.teachthefuture.uk/>

Climate Collapse Scheme of Work

<https://learningrebellion.earth/knowledge-base/geography-climate-collapse-scheme-of-work/>