

TEACH THE FUTURE

1.0 Introducing Teach the Future Scotland

Teach the Future Scotland is the Scottish Youth Climate Strikes (SYCS) campaign, supported by the National Union of Students Scotland (NUS Scotland), to repurpose the whole Scottish education system around the climate emergency, climate justice and ecological crisis.

As students studying in Scotland, we believe the majority of teaching and learning throughout the entirety of the Scottish education system remains misaligned from the systemic changes urgently required to make society just and sustainable.

Despite the admirable policy commitments in '*Vision 2030+*'¹ and action plan², the commitment to low-carbon skills in '*Protecting Scotland's Future: the Government's Programme for Scotland 2019-2020*'³, and the progressive work of Learning for Sustainability Scotland (LfSS), we have to report that, unfortunately, our education system routinely fails to educate, prepare and equip us, and our fellow students, to abate and stop climate emergency and ecological crisis and to deliver climate justice⁴.

In our view, based on our experience, that the five strategic recommendations of *Vision 2030+*⁵ are all a long way from being fully routinely implemented. Given the climate emergency and ecological crisis, and the very real resulting racial injustices, it is unacceptable to rely on incremental progress to full implementation over the next ten years to 2030. From our research it appears that the *Vision 2030+* commitments are largely un-funded and rely on goodwill and collaborative action for implementation, which is also incompatible with urgent action.

Given the urgency of the situation, reinventing and reforming education around the climate emergency and ecological crisis must be a well-funded strategic priority for the Scottish government from 2021, with full implementation of the *Vision 2030+* plan being delivered by 2025 at the latest. Additionally, we are calling for a number of new commitments, legal duties and financial investment to underpin this vital work, as documented in our four 'asks'.

Our Teach the Future campaign replaces SYCS's original demand that the climate crisis is prioritised in education, and builds on the education for sustainable development work in tertiary education led by NUS. Teach the Future Scotland is aligned with the [Teach the Future England](#) campaign. As education is a devolved matter, our asks are tailored to Scotland, unless stated as a UK-wide recommendation, which we would suggest the four nations collaborate to deliver.

¹ <https://education.gov.scot/media/ulodcmfl/res1-vision-2030.pdf>

² <https://education.gov.scot/media/cx1lwhvu/learningforsustainability-vision2030actionplan.pdf>

³ www.gov.scot/publications/protecting-scotlands-future-governments-programme-scotland-2019-20/pages/5

⁴ The social injustice issues pertaining from global heating

⁵ <https://education.gov.scot/improvement/self-evaluation/vision-2030-report-concluding-report-of-the-learning-for-sustainability-national-implementation-group/>

2.0 Research

The following UK-wide research studies helped influence our thinking:

- [NUS attitudes towards sustainability survey](#) (7,800 responses, first year students in university, UK-wide, Nov 2017): 57% of students want to learn more about sustainable development;
- UKSCN / Oxfam [teachers survey](#) (350 responses, primary and secondary, UK-wide, May 2019): 75% of teachers feel they haven't received adequate [training](#) to educate students about climate change; 69% of teachers think there should be more teaching about climate change in UK schools.
- [YouGov poll](#) (2,579 adults, UK-wide, January 2020): 71% of respondents said learning about climate change should be part of the school curriculum, up to 79% in Scotland.
- [Censuswide Scotland](#) (1,002 adults, Scotland, May 2019): 79% of Scots want more general education on climate change, with 78% and 72% looking to the UK and Scottish [Governments](#) respectively to raise awareness.

3.0 What are the problems we are seeking to address?

The Teach the Future Scotland team consulted with a range of students and staff studying and working in the education system in Scotland from primary through to tertiary. The following is a summary of what we understand to be the problems with the how education system in Scotland is preparing us to tackle the climate emergency and ecological crisis and deliver climate justice:

3.1 The entitlement to learning for sustainability in Scotland⁶ is not widely known about by students and teachers and appears not to be regarded as important by most educators. It also does not cover tertiary education, which is where most leadership education happens and the development of skills for work;

3.2 There is no stated or established pathway or plan for how learning about sustainability should develop through Scottish education, from early years through to adult education;

3.3 The main outcomes that educational institutions are measured by currently present a major barrier. In Scottish secondary schools, the focus is on us passing exams in specific subject areas, rather than having prepared us for the uncertain future we face. This inadvertently creates excessive competition between us, rather than facilitating collaboration and community spirit. As university students, our success is often measured by what we go on to earn, rather than the social and environmental good we go on to achieve;

3.4 Many of our teachers and lecturers have told us that they do not have sufficient knowledge about the climate emergency and ecological crisis to confidently teach about it beyond the minimum curriculum specification. Most of the c60,000 teachers in Scotland were not taught this as part of their teacher education and have not been re-skilled or retrained. As such, the quality and transformational impact of the sustainability education we receive is dependent on whether teachers and lecturers are passionate enough about the cause to have self-educated;

⁶ <https://education.gov.scot/education-scotland/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-building-from-the-statement-appendix-incl-btc1-5/what-is-curriculum-for-excellence>

3.5 Whilst we welcome inclusion of learning for sustainability in the General Teaching Council for Scotland's professional standards for teachers, and the Professional Standards for College Lecturers, many of the teacher education courses delivered in Scotland appear to not have been updated or reviewed to include substantive content on the climate emergency, climate justice and the ecological crisis;

3.6 Teaching about sustainability requires contributions from across subject disciplines. This seems to happen more in primary and tertiary than secondary, in part because the curriculum for secondary students is organised in silos to facilitate examinations, the study of Highers (16 to 18), and then entry to HE. This impedes the commitments to interdisciplinary learning in the *Vision 2030+* plan and the stated flexibility in Curriculum for Excellence. The result is a discontinuous learning journey on sustainability from primary to tertiary, which leads to a loss of engagement and interest;

3.7 In Scotland, learning about the climate emergency and ecological crisis is a part of several curriculum areas including science, geography, technology, social studies, health and well-being, and religious and moral education as part of the sustainability theme. Although this is much broader than in England, Wales or Northern Ireland, it is still very limited content given the magnitude of the climate emergency and ecological crisis. In our experience the content is often taught in a way that does not connect it with other subjects, despite most subjects being able to contribute to our understanding of these issues. In higher education subjects tend to be more specialised and siloed and often have no reference to the climate emergency or ecological crisis at all. Some universities offer optional sustainability modules rather than embedding it in subject content. The culmination of all this is that many students, teachers and lecturers see sustainability as something for scientists or geographers, rather than something that every student *must* understand. We would like to see educators in Scottish secondary and tertiary institutions treat sustainability as an educational principle, relevant to everything that is taught, much as equality is, rather than a subject or discipline;

3.8 The coverage of climate change in the sciences and geography at secondary level is both limited and insufficient;

3.9 Geography is not a compulsory subject at National Level (NAT 4/5), despite it containing useful climate-related content;

3.10 Many Scottish universities offer bolt-on modules on sustainability, rather than integrating it into core course content. This risks sustainability being perceived as an optional extra rather than something that is integral to a subject or profession;

3.11 Although the Scottish Qualifications Authority has rewritten its guidance to include learning for sustainability, this only applies to new subjects and those up for review or renewal, rather than the change having forced a comprehensive review of all subjects. This means there will be a significant time lag in implementing the curriculum change that is urgently needed;

3.12 Most of the professional and chartered bodies that accredit Scottish tertiary education course content appear not to assess or require relevant content on the climate emergency or ecological crisis;

3.13 Climate justice hardly gets mention in most relevant course content and seems to be regarded as alternative or peripheral, rather than mainstream and critical to the whole agenda;

3.14 Although learning for sustainability is mentioned in the How Good is our School (HGIOS) assessment framework, and has been in the framework since 2016, there appear to be no implications of sanctions if a school does not deliver the entitlements and expectations relating to *Vision 2030+*. The same applies to the How Good Is Our College (HGIOC) framework. This inadvertently leads teachers, tutors and school and college leaders to deprioritise and devalue the entire agenda;

3.15 It is unclear to us how, given their freedom to choose their curricula and exam boards, fee-paying schools are encouraged, supported and assessed on their teaching on the climate emergency, climate justice and ecological crisis;

3.16 Vocational courses in Scottish colleges urgently need overhauling to reskill the workforce to deliver the transition to a low carbon economy (e.g. retraining plumbers away from gas fired boilers to solar, heat pumps, battery installation, etc.);

3.17 There has been a significant and ongoing reduction in opportunities for outdoor education. This, together with social factors, has led to concerns with our relationship with the natural world - as evidenced by the RSPB's work on connection to nature, and the notion of 'nature deficit disorder'. This is an issue in other countries too, as highlighted by the US campaign 'No Child Left Inside'. This is compounded by the rise of digital technology and social media, which often outcompetes being in nature. Learning in, and about, nature, especially at an early age, helps nurture a sense of wonder, fascination and curiosity, which reinforce innate desires to conserve and protect what we have. The commitments to outdoor education made in the *Vision 2030+* action plan, welcome as they are, are likely to be insufficient to reverse this trend;

3.18 Scottish educational institutions are typically not acknowledging, or sufficiently acting upon, the youth voice on the climate emergency and ecological crisis. There is great support and sympathy for our strikes, our cause and our plight, but as yet no meaningful or coordinated attempts to work with us on solutions in relation to our education, at a local or national level;

3.19 A lack of funding is often cited as a barrier by young Scots who want to take more action on the environment. This was reinforced at the World Economic Forum in 2020 when conservationist Jane Goodall said "The young people know what needs to be done, but very often there aren't the resources for them to actually do it";

3.20 Despite recommendation 10 in *Vision 2030+⁷*, most Scottish schools, colleges and universities do little or nothing to encourage us to contribute to, or lead on, sustainability in terms of operational and estates issues. Sustainability is often done for us, rather than with or through us. This remains a missed learning opportunity;

3.21 Despite recommendation 9 in *Vision 2030+⁸*, the buildings and estates that we are educated in and on are often environmentally inefficient, wasteful and powered by fossil fuels.

⁷ Recommendation 10: '*Learners should be fully involved in the process of improving the sustainability of their campus as it provides a valuable opportunity for them to develop new skills and awareness of careers. We should recognise that school grounds are valuable community assets and wherever possible ensure that learners and their communities are given access out of school hours.*'

⁸ Recommendation 9: '*Local authorities need to remain vigilant to ensure that improvements to their school estate meet the highest standards of sustainable and environmental design as set out in Building Better Schools and Principle Six of the School Estate Strategy. Care needs to be taken to ensure that ambitions to improve the sustainability of the school estate are kept up front at each stage of the design process to achieve the desired outcome. Buildings and grounds need to support learning for sustainability pedagogy and practice and include the provision of thoughtfully-*

These assets are our subliminal curriculum and form part of our learning on sustainability. When we are lucky enough to receive good transformative climate education, the unsustainable buildings around us often undermine the key message and cause apathy or frustration amongst us. This year, in 2020, substantial new educational buildings are being built across Scotland without renewables on them, which is perverse and regressive given the ambition stated in *Vision 2030+*.

4.0 What are we asking the Scottish Government to do?

ASK 1: A government commissioned review into how the whole of the Scottish formal education system is preparing students for the climate emergency and ecological crisis.

A review, commissioned by the Scottish Government, led by an independent Chair, endorsed by SYCS and NUS-Scotland representatives, supported by a panel of students, into how the Scottish formal education system in its entirety (primary through to adult education) is preparing students to abate and end the climate emergency and ecological crisis and deliver climate justice. It will need tight terms of reference and ideally report within a year (ideally reporting before November 2021), in keeping with the urgent nature of the climate emergency. The review should propose detailed and costed recommendations for the Scottish Government and autonomous educational institutions, including universities. All stages of the review should be developed in consultation with all relevant interest, stakeholder and representative groups, especially young people and students. The review should take into consideration our other three asks but not delay their progress.

ASK 2: Inclusion of the climate emergency and ecological crisis in teacher education and a new professional teaching qualification

Learning about the climate emergency, climate justice and ecological crisis should be a substantive and compulsory part of all teacher education programmes from September 2021. There should be a new Accredited Professional Recognition Programme for teachers on the climate emergency and ecological crisis, including climate justice and considerations relating to eco-anxiety. These actions should not wait for the review in Ask 1 and should be done immediately.

Ask 3: Increased priority for sustainability in school inspections and publicly influencing educational rankings

Education Scotland should ensure that the Chief Inspector of Education puts significant new emphasis on learning for sustainability in all HGIOS assessments from January 2021, and that it is included in the HGIOC assessment process for further education colleges. This new emphasis should have a significant weighting in the school's / college's overall assessment and should

developed greenspace to support learning and facilitate daily contact with nature and natural play. Partnership working with end users should be supported to ensure they use the buildings and grounds in a sustainable way.'

include all five of the strategic recommendations of *Vision 2030*⁹. Building on its global leadership position on learning for sustainability, the Scottish Government should lead a joint collaborative effort to change the PISA assessment and university league tables so that they substantively include learning for sustainability. These actions should not wait for the review in Ask 1 and should be done immediately.

ASK 4: A Scottish Climate and Biodiversity Emergency Education Act

This is inspired by the US Defence Education Act, which was the large, ultimately successful, investment in their education system on science, technology, engineering, and mathematics (STEM) as part of the space race.

We are asking for a Scottish Climate and Biodiversity Emergency Education Act; a symbolically important new act of Parliament, sitting above the various pieces of existing education legislation, stating a legal expectation and duty on education providers at all levels to deliver appropriate teaching and learning on the climate emergency, climate justice and ecological crisis, and providing substantial new funding to enable this to happen at pace.

The funding provided by the Act would allow for:

- A comprehensive, nationwide urgent reskilling and retraining programme for existing teachers and lecturers, and other key educational institution staff, on the science of the climate emergency and ecological crisis and the systems changes required to abate them, including provision of new teaching resources at all levels. This would include training to enable these staff members to identify eco-anxiety and support pupils suffering from eco-anxiety. It would also include climate justice;
- A UK-wide Climate and Biodiversity Education Information Institute (CaBEII), funded for at least ten years, to disseminate scientific information to educators about climate change, its effects and measures of prevention. This will include teaching resources as well as continuous professional development (CPD) materials so educators can maintain up to date knowledge on the issues;
- A programme of vocational training through the development of Scottish centres of excellence to promote the reskilling of the workforce in line with the Scottish Climate and Biodiversity Emergency Skills Action Plan that is in development;
- A UK-wide programme for research into the impact and outcomes of sustainability learning in terms of learning outcomes, attainment, resilience and wellbeing;
- A programme of outdoor education and connection to nature linked to learning about the climate emergency and ecological crisis;
- A Scottish Climate and Biodiversity Emergency Youth Voice Grant Fund, so that youth voice climate boards can be established in all education providers, local authorities and NHS trusts.
- Establishment of a UK-wide Youth Climate and Biodiversity Endowment Fund to fund youth-led climate and environmental social action, enabling students in every educational institution to engage their peers, teachers and parents in practical, local action to abate and stop the climate emergency and ecological crisis.

⁹ <https://education.gov.scot/improvement/self-evaluation/vision-2030-report-concluding-report-of-the-learning-for-sustainability-national-implementation-group/>

The Act would also impose a new duty on Scottish primary and secondary schools to ensure they designate a senior member of staff as a climate and biodiversity coordinator, responsible for implementing their new duties, and create a general duty on the Scottish Funding Council with regard to teaching and learning about the climate emergency and ecological crisis.

Importantly, the Act would also ensure that the Scottish Government puts educational buildings to the front of the queue to be retrofitted to net-zero standards. If our education system is to teach students about sustainability, the buildings they learn within must be sustainable, because of the importance of the subliminal curriculum to learning. The Act would commit the substantial funding required to make this happen, ensuring all new state-funded Scottish educational buildings are net-zero from 2022; all existing state-funded Scottish educational buildings retrofitted to net-zero by 2030. With reference to new buildings and building improvements, this might include a clause that amends the Building (Scotland) Act 2003 stipulating new standards for educational buildings.

The Scottish Climate and Biodiversity Emergency Education Act should not wait for the review in Ask 1 to conclude and should be progressed immediately, ideally passing into law before COP26 in November 2021. The Act might be informed by the review, which will be developed concurrently with the Act.

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scotland@teachthefuture.uk