

National Association for Environmental Education (UK) Annual Review 2018 / 19



Charity Number 1166502

This is a report on the work of NAEE during 2018 / 19. It is an account of key developments and contains reports finance and management, our publications, the new NAEE Fellows, and on our collaboration with Rotary UK & Ireland. It also contains a number of contributions that reflect on the context in which our work is carried out that were published during the year in our journal or as blogs on the website: naee.org.uk. These are from Ben Ballin, chair of the West Midlands Sustainable Schools Network and NAEE Fellow, who writes about the challenge that climate change presents to English schools; Joyce Hallam, a recent headteacher and advisor to the Global Learning Programme, who writes about the match between GCSE specifications and the sustainable development goals; and Graham Frost, the Head of Robert Ferguson primary school in Carlisle who writes about his children's organisation of a climate change summit in the city.

It also contains a summary of the research by NAEE Fellow Melissa Glackin and Heather King (of King's College London) into environmental education in English secondary schools, and an update on our school bursary scheme that is made possible because of the generosity of Kenrick family trusts, and a report on a bursary-funded trip by Hillcrest school.

We begin, however, with two articles written by NAEE trustees. The first is by Bill Scott, Chair of Trustees, who looks back on the year when environmental education has been more visible than usual. The next is by Nina Hatch, Chair of the Executive Committee, who reflects on the welcome Green Apple Award that NAEE received in late 2018.

The photomontage below shows children and activities on these Kenrick bursaries through the year.



Photo credits: Tara Harris at The Oaks Primary School, Emma Browse at Nelson Mandela Primary School, and Hyewon Cha / Sarah Hannon St Brigid's Catholic Primary School.

NAEE's charitable objects are to provide a public benefit by advancing environmental education within early years settings, primary and secondary schools, and institutions responsible for teacher education within the UK and elsewhere.

Is there still a role for environmental educators?

Bill Scott is Chair of NAEE Trustees. He writes here in a personal capacity about developments over the last year.

Do you think that the last 12 months been good for environmental education? Well, if you wanted to build a case for saying so, you might well identify the following points:

1 The government launched the Children and Nature programme which is supporting three projects: [i] *Nature Friendly Schools* [ii] *Community Forest and Woodland Outreach* [iii] *Growing Care Farming*. This builds on the 25-year Environment Plan.

2 Researchers at King's College London published a report into environmental education in English secondary schools which gave some much needed publicity to what we do and why there needs to be more of it. See page 11.

3 Young people began to assert their own voices in the debate around the need for social action and educational change to help us face up to climate change. The

UK Student Climate Network (UKSCN) organises Friday youth school climate strikes each month.

4 Conferences and meetings are taking place to argue for change; students are prominently involved.

5 Parliament voted for a motion declaring a climate emergency.

6 Extinction Rebellion protests led to the formation of Teachers for Climate Truth which is calling for radical change in schools.

7 Greta Thunberg was feted in the UK parliament in April. Mr Gove said: "*Your voice – still, calm and clear – is like the voice of our conscience. ... I felt great*

admiration, but also responsibility and guilt."

8 There was a meeting in July when UKSCN met opposition political party leaders to argue their case for action. No one was there from a conventional EE organisation. Some political parties now support curriculum reform.

9 Individual schools continued to take action in relation to the climate and ecological issues we face. See the article by Graham Frost on page 12.

10 A number of teacher unions passed motions to support curriculum change in relation to climate and ecology crises.

There are some bright spots here, particularly the heightened public awareness of climate change. I'm not celebrating, however. For example, I see the Children and Nature programme as a missed opportunity to enable students to learn more about the natural world, our place in it, and its imperilled nature. The programme is so focused on health and well-being that it's surprising it's not funded by Public Health England.

The DfE meanwhile maintains that the national and wider school curriculums provide ample scope for schools to help students understand the issues. They have a point, of course, as NAEE's curriculum reviews have illustrated, but they seem unconcerned that not all schools do so despite the opportunities and encouragement.

There is much to admire in the energy and organisation of the UKSCN. A transformative approach to education is required, they say, through something such as a Climate Emergency Education Act. This would integrate climate change, the effects of climate breakdown, and preparation for a drastically altered

world through all subjects at all levels. This, they say, would transform learning experiences.

UKSCN is at heart a political project rather than an educational one. This is obvious from their website. This goes for Teachers for Climate Truth as well. Of course, all such educational change projects are political as they are focused on social change, but not all are focused around a challenge to the dominant economic system as these are. The centrality of the demands for a zero-carbon economy by 2030 (or is it 2025?) and the Green New Deal illustrate this.

Finally, it's clear to me that those conventional organisations that government is not talking to at the moment still have an important role in stimulating school development and curriculum change, and the more that they can work together the more effectively they will be. With that in mind, it remains a mystery as to why the Green Alliance has so little to say about education or learning, despite dedicated teams within their separate organisations. It's as though they don't really believe that schools have anything to contribute.

Reflections on a Green Apple

Nina Hatch, chair of NAEE's executive committee writes about NAEE's Green Apple Award.

Awards come in all shapes and sizes and can mean a great deal (or not) to the recipient. The one NAEE received last year really is Green Apple shaped and mounted on a gold coloured engraved plinth. I do not know what the apple is made from – it certainly isn't edible, and I couldn't feed it to my pigs.

But the accompanying certificate assures me that this was presented to us during a carbon-neutral presentation ceremony at the Houses of Parliament on Monday Nov 12th. That is appropriate to the aims of NAEE and for the International Green Organisation which funds and presents these awards. A donation has also been made on our behalf to the Green Earth Appeal whose tree planting in the world's poorest communities not only helps the environment and wildlife, but also creates jobs and changes lives.



When we arrived at the Houses of Parliament we had no idea what this presentation would entail. The 'we' being myself accompanied by Sue Fenoughty and Gabrielle Back, long standing members of the NAEE executive committee. Just walking along seemingly endless corridors where both the decoration and

architecture is still the same as when AWN Pugin designed it, gives you a sense of impending importance. At the Terrace Room overlooking the Thames, the room was buzzing with representatives from a wide range of companies and organisations. We were all there to receive a Green Apple in recognition of projects that had made a significant, and usually sustainable, impact upon some aspect of the UK's environment.

When it was announced that NAEE had won Gold (the highest category) for environmental best practice within education I was surprised, but also delighted.



For this is an acknowledgement for NAEE members who have put so much voluntary commitment into running the Kenrick Days project, and for our unique journal *Environmental Education* which has been published for over 50 years. With many awards being presented my one regret of the afternoon is that we had no time to tell other recipients exactly what we do.

There were managers of shopping centres, architects, representatives from water companies and wildlife

trusts and even some primary school children from Wales who had persuaded their local authority that they MUST have their milk in recyclable glass bottles. All passionate pioneers in their own area of environmental awareness.



So, what does this mean to NAEE?

For the Hugh Kenrick Days project it shows the family of the late Hugh Kenrick that their philanthropy is well placed. By providing bursaries to Birmingham and West Midlands schools to visit environmental study centres they are supporting teachers who can then help young people to learn about our place in the natural world and the pressures that our lifestyle is placing on it. For our *journal* which has reached edition number 121 it is recognition of many years of sourcing, editing and publishing articles which will be relevant to teachers and our supporters.

So, a Green Apple can mean a lot.

Financial Summary

The Association ran a significant budget surplus during 2018/19 for the second year running. Again, it was because of a number of donations from generous sponsors. Four donors provided money earmarked to further our work providing environmental education experiences for young people via the Hugh Kenrick bursary scheme. This included over £20,000 from the John Kenrick Charitable Trust. Two donations provided unrestricted income which will be used, together with other funds, to further the Association's work in relation to its charitable objects. Considerations as to how best to use this money have been a major focus over the last few months and we are launching a number of initiatives in the new year. NAEF continues to be very appreciative of this generosity and its valuing of the contribution we make. Income / expenditure figures for 2018/19 are set out below.

2017/18		2018/19	
Income	Expenditure	Income	Expenditure
£16,509	£10,690	£33,869	£12,248

Income	%	Expenditure	%
Investments	22	Bursaries	66
Membership fees	6	Publishing / website	18
Donations	71	Networking & Communications	4
Publications, sales, royalties & fees	1	Member services	7
		Core professional costs	5
Total	100	Total	100

88% of expenditure went directly on the main ways we deliver our charitable objectives: bursaries, publications, networking, communications, and the website. We should note here that this does not include the considerable, but incalculable, in-kind contribution from members and volunteers to the operation of the Association. It is good to be able to record the Association's heartfelt thanks to all who give their time freely to what we do. This in-kind contribution never gets represented on a balance sheet but we should be lost without it. Fuller details of the Association's audited accounts are available on the Charity Commission's website.

Publications – journals

Once again, three journals were published. e-journal 119 focused on Water. Paper journal [120] focused on the sustainable development goals, and e-journal 121 had a focus on Waste. Volumes 120 and 121 are currently restricted to members; but the rest are available at: tinyurl.com/ovwym6a.

Vol 119

- Connecting children to canals and rivers
- Cromwell primary school students visit Martineau Gardens
- Divers combat marine pollution
- Educating children about sharks
- Revaluing parks and green spaces
- Inspiring a love of spiders
- Blanket bogs in the Peak District
- Canada's energy efficiency education
- Forest Fridays in the USA
- Tweeting about birds

Vol 120

- Why SDGs are important to schools
- Linking urban science and SDGs
- Lillian de Lissa nursery school students visit Martineau Gardens
- Froglife and the SDGs
- Torriano primary school and the global goals
- School 21 students leading change
- Embedding the SDGs in the curriculum
- The state of EE in English secondary schools

Vol 121

- Circular Economy principles and the world of urban recyclers
- Shirestone Academy students visit Birmingham Botanic Gardens
- Imagining a greener future
- Taking a bite out of food waste
- Plastic pirates invade schools to provide waste education
- The plastic nightmare in Quintana Roo, Mexico
- Walking buses in Portadown
- The Global Environmental Education Partnership [GEEP]

Governance and Management

NAEE's charitable objects are to provide a public benefit by advancing environmental education within early years settings, primary and secondary schools, and institutions responsible for teacher education within the UK and elsewhere, in particular but without limitation by ...

- [i] facilitating curriculum development through the provision of resources, information and ideas for teachers,
- [ii] providing financial support for pupils to visit outdoor education centres, and
- [iii] collaborating with organisations that have related objectives.

The main ways in which these are realised are:

- Hugh Kenrick bursaries for schools;
- publishing (journals and reports);
- web and social media outputs
- collaboration with other organisations.

The transition to becoming a charitable incorporated organisation (CIO) is now complete as is the move of the registered office to the University of Bath.

There have been six meetings of the Trustee Board during the year, four of which were via zoom.us which is proving to be a more reliable mode of video-conferencing than Skype. Attendance overall was 87%. There was 100% attendance at three meetings, and no trustee missing more than two.

Permission was received from the Charity Commission to increase the number of trustees to nine in order to better represent the breadth of the UK's environmental education interests. A start has been made on expanding the group with the recruitment of Tim Baker, Headteacher of Charlton Manor School in Greenwich. This increases the number of independently-elected trustees to four. A further trustee will be added during the coming year following wide consultation. Expressions of interest are welcome.

There were three executive committee meetings, all face-to-face. However, the bulk of the week-by-week activity that is the essence of what NAEE does, continues to be carried out by effectively-co-ordinated working groups. Recruiting an efficient and effective administrator has helped everyone.

Trustees and Officers in 2018 / 19

Trustees

Justin Dillon (President)
 Gabrielle Back
 Tim Baker (from June 2019)
 Nina Hatch
 Elsa Lee
 Morgan Phillips
 William Scott (Chair)

Executive Committee elected officers

Nina Hatch (Chair)
 Elsa Lee (Vice Chair)
 Sue Shanks (Treasurer)

Executive Committee co-opted members

Gabrielle Back David Fellows Sue Fenoughty
 Juliette Green Henricus Peters Alona Sheridan

Hugh Kenrick School Bursaries

Awarding bursaries to schools in Birmingham and the West Midlands to help them develop environmental education for students is at the heart of what NAEE does. It is possible because of the generosity of Kenrick family trusts.

to 24 schools, 63% of which were new to the scheme. The number of bursaries given since the start of the scheme is 101, and the number of schools receiving is 74. Fewer than 10% have been secondary schools, which remains a challenge.

students benefiting from the scheme is now over 5,200. The value of the bursaries granted in the 8 years of the scheme's operation is now almost £33,000.

These data indicate a consistently successful allocation of funds to school.

In 2018/19, bursaries were granted

More happily, the number of

Hugh Kenrick Bursaries in Action

This is an account of the visit in January by a Year 8 group from *Hillcrest School & Sixth Form Centre* to Birmingham Botanical Gardens & Glasshouses as part of NAEF's Hugh Kenrick Days bursary scheme. It's written by class teacher Mrs Sanger. Details of NAEF's Hugh Kenrick Days bursary scheme can be found [here](#).

With the support of the National Association for Environmental Education and a Hugh Kenrick Days bursary, many of our Year 8 students were provided with a fantastic opportunity to visit Birmingham Botanical Gardens and Glasshouses to consolidate what they have learned whilst studying the Ecosystems topic in geography.

Our students were able to get up close and personal with some of the plants they had studied during lessons and it gave them a real sense of appreciation as to the beauty, fragility and diversity of plant life that exists beyond the classroom.

The tropical and sub-tropical glasshouse talk, delivered by the education team at Birmingham Botanical Gardens, was really engaging! Students learned about the range of plant adaptations that exist in tropical and sub-tropical environments, as well as considering what plants grown in these conditions are used for. Our students were provided the opportunity to ask questions at the end of the session, and many of them did!

“The trip taught me about fish and plants and was very educational.”

Students also had the chance to visit the Arid House, where they considered the function and importance of many of the spiky and spiny adaptations they observed. Following a safety brief, students set about discovering how

desert plants are adapted to survive against predators and in extreme climatic conditions. Students applied what they learned in a task which required them to think about how the specially-adapted plants might help them to survive if they ever became stranded in the desert!

“Botanical Gardens was a fantastic experience and there were lots of interesting plants that we got to see, as well as some amazing animals including peacocks.”

Following this, students journeyed to the Mediterranean House to take in the sights and smells of the specially adapted plants there. They employed their wildest imagination to design their own fragrance, complete with a name, catchphrase and bottle design linked closely with the plants they liked the smell of.



Photo credit: Hillcrest School

Back at school, follow-up geography lessons have allowed our students to discuss what they learned about the balance between the human and natural world. Students recently sat an assessment in which they had to design a specially-adapted rainforest animal and many of the students have taken lots of inspiration from what

they learned during their visit to Birmingham Botanical Gardens!

“I enjoyed the trip because I learnt a lot and the plants and flowers were interesting.”

Some of our students have also considered threats to plant diversity by attending a Debate Club centred on the importance of environmental conservation. Our Gardening Club attendees also have a much wider appreciation of the growing conditions required for certain plant species. Inspired by their visit to Birmingham Botanical Gardens, our Gardening Club attendees are currently looking into options for revitalising our resident greenhouse!

“I learnt that it takes a long time for plants to adapt to a complete new environmental and that plants grow on trees to reach sunlight.”

A massive thank you to the Hugh Kenrick Days team from all of us here at Hillcrest School!

We had a fantastic day and many of us are looking forward to visiting Birmingham Botanical Gardens & Glasshouses in our own time to help educate family and friends!



**UK National
Association for
Environmental
Education**

NAEE's New Fellows

The NAEE's Fellows scheme began in 2017 to recognise the contribution that individuals are making to environmental education across the UK through their work, and so that the Association can work closely with them to further support and encourage environmental education.

We appointed three new Fellows last year:

Judy Braus has been actively involved in national and international environmental education efforts for almost three decades. She is currently the Executive Director of the North American Association for Environmental Education (NAAEE), a non-profit organization dedicated to advancing environmental literacy and civic engagement to create a more equitable and sustainable future for all. Prior to NAAEE, she successfully managed the education and outreach departments at three conservation organizations: the National Audubon Society, World Wildlife Fund, and the National Wildlife Federation.



Judy has led many international environmental education projects, facilitated leadership workshops and conferences in dozens of countries, been the chief editor of several successful national publishing efforts focused on environmental education, and published in numerous nationally recognized periodicals and books. Her areas of expertise include environmental education, project management and strategic planning, leadership training and facilitation, conservation planning, writing and publishing, diversity and inclusion, curriculum and web development, and fundraising.

Margaret Fleming leads MF Associates, a small educational consultancy with a focus on sustainability and science education. She is active in a number of international initiatives and is currently working on the EU project Urban Science, which is delivering a means to teach pupils how science can develop solutions for sustainable cities, motivating them to view the positive benefits of science to the urban environment.



Previously Margaret was a partner in the EU project CoDeS (School and Community Collaboration for Sustainable Development) leading on teacher education initiatives. CoDeS aimed to provide a fresh perspective for inquiry-based science learning and improve students' motivation, deepen knowledge in science and develop civic competencies. She worked with the ENSI network, and with many of the official environmental education contacts for most EU countries, and is collaborating with other European experts from Austria, Cyprus and Hungary to keep the network alive. International activity has also included membership of the United Nations RCE-EM (Regional Centre for Expertise for ESD (East Midlands)).

Henry Greenwood is founder and managing director of Green Schools Project, a social enterprise he set up in 2015. He is also a Maths teacher who, while teaching at Kingsmead School in Enfield, developed the role of sustainability coordinator, assembling a group of students who embarked on an energy saving campaign that saved the school more than £35,000 over 3 years, started a recycling competition, installed solar panels, created a vegetable garden and carried out various other projects for which they were awarded the Eco-Schools Green Flag.



Henry used this experience to set up Green Schools Project which supports young people to lead projects that protect and restore the natural world, helping to inspire their school and community to go green. This enables them to build leadership, communication and teamwork skills while providing them the opportunity to play a role in tackling the climate and ecological crisis.

We said a grateful goodbye to Philip Murphy whose Fellowship came to an end. Further details of NAEE's Fellows are available on the website, and we shall be appointing additional ones this autumn. Expressions of interest are always welcome

Climate Change: still a challenge for English schools

Ben Ballin is chair of the *West Midlands Sustainable Schools Network* and an NAEE Fellow. He writes here in a personal capacity.

Young people are on the march against climate change, inspired by the Swedish climate striker Greta Thunberg and her accusation that older generations are “*stealing their future in front of their very eyes.*” How do we as environmental / sustainability educators best respond to their powerful challenge, and not least the UK Student Climate Network demand that the National Curriculum to be reformed to address the “*ecological crisis as an educational priority*”?

At the end of February, I made a short presentation about this to about forty people in the Climate Reality Global Education Group, an alliance of interested parties around the world. How had we got to the point where young people were demanding such a strongly-directed response from the education system? It is not, after all, as if there have been no attempts by government to put the environment and/or climate change and/or sustainable development on the education agenda in England.

However, such attempts have been something of a long and winding road of policy and emphasis shifts, of passing responsibility from one agency to another, of stuttering stops and slow reboots.

These include:

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| <ul style="list-style-type: none"> • 1988: The first National Curriculum for England and Wales includes Environmental Education as a ‘cross curricular dimension’. • 1992: Agenda 21, Chapter 36 requires local and national government to “Promote Education, Public Awareness and Training” of sustainable development. A plethora of initiatives, projects and local government posts ensues. • 1998: The <u>Holland Report</u> proposes ‘key concepts for sustainable development’ – this coincides with a broadening of curriculum concerns to embrace statutory Citizenship Education. • 2000: A new National Curriculum for England features environment, sustainability and global citizenship as strong elements within Science, Geography, Design Technology, Citizenship and PE. There are passing references to climate change. Sustainable development is prominent in the curriculum’s values, purposes, aims and aspects. • 2000s: Sustainable Development and Global Citizenship are promoted by QCA as non-statutory whole school ‘dimensions’. • 2006-10: DEFRA’s Sustainable Schools Framework proposes 8 ‘doorways’. It is well-resourced but non- | <ul style="list-style-type: none"> statutory. Regional governments play a key support role and it gets a mention on the Ofsted self-evaluation framework. • 2006-8: DEFRA’s <u>Climate Challenge Fund</u> aims to raise awareness about climate change. £8.6 million is distributed in grants via 83 project delivery partners, of which £1.9 million is provided to projects explicitly targeted at young people. • 2010: The Coalition government comes in with a new broom, and sweeps away the Sustainable Schools Framework, regional government and former sustainability champions QCA. In 2016, the Department of Energy and Climate Change is abolished. • 2014: Another new <u>National Curriculum</u> for England sees Environmental Education weakened and some references (e.g. in Primary Geography) removed. However, there are explicit references to climate change in Secondary Science (KS4) and Geography (KS3 /GCSE). The growing number of academies are not obliged to follow this curriculum. • 2014: <u>SDG 4.7</u>, signed by the UK government, requires it by 2030 to “<i>ensure that all learners acquire the knowledge and skills needed to promote sustainable development.</i>” |
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So much for government.

An alternative timeline would show that – whatever the government did – educators, charities, councils and publishers have often seized the initiative for themselves. A glance at projects that I had some personal connection with would show networks like Tide~ global learning engaging in numerous teacher projects on climate change between 2000 and 2010, producing resources and hosting events. So too did the West Midlands regional broadband network, local authorities like Worcestershire and Birmingham, even a Theatre in Education company. The pattern is the West Midland region was repeated elsewhere.

However, a closer glance would also show that much of this work was at least partly funded by the Climate Challenge Fund, which stimulated a short-lived bubble of activity during its brief spell on Earth. So, while today there is still energetic, positive and innovative activity in our region from the likes of Sustrans, SKIPS Educational, School Energy Efficiency and Solutions for the Planet, its scale and visibility has declined from the late 2000s peak.

So here we are, perhaps twelve years from the brink, facing the prospect of a new mass extinction. What can we say today to those young climate protestors? How can they trust us not to steal their future in front of their eyes?

I think we can be clear with young people that there is a role for government, but we can't always rely on it. Perhaps their demands, ironically, put too much faith in national government? What we really need the state to do is to act where it can be most effective.

Meanwhile, there are local and regional networks that can help support them in addressing the “*ecological crisis as an educational priority*.” For example, at

the last meeting of the West Midlands Sustainable Schools Network, we decided to make contact with school strikers, as we felt it would be helpful for them (and their teachers) to see that people are already out there, taking these matters seriously. We also decided to strengthen our network's connection to other networks, regionally and nationally. It may help young people to see that strong networks (like theirs and ours) can be functional and resilient, especially given the short-term attention span of the political process. Meanwhile, national bodies such as SEEd and NAEE can also offer support and their own campaigns for curriculum change.

it seems to me that at the heart of the young people's curriculum demands is a sense of urgency, more than a demand for formal content. To take an analogy, we can know in principle how recycling works without actually recycling a single thing. Climate education is therefore not just about 'knowing stuff' (which is already there in the National Curriculum) but about urgent priorities and powerful values. That said, as anyone who has taught a cross-curricular topic will know, there is an 'embeddedness pitfall': if content is not made explicit, it often gets lost in the mix.

Significantly, the climate strikers have already realised that sustainable change is not about chasing the money. However, as the Climate Challenge Fund example shows, better resourcing really can make a difference, especially if resourcing is sustained and well-directed, rather than intermittent and scattergun.

Finally, and most importantly, the climate strikers tell us that it is time to panic. Our house is on fire. We are making a contribution but is it enough? What else can we come up with together.

Ben can be contacted at: benballin@hotmail.com and @wmsussch

What is *teachthefuture.uk* calling for?

1. A government commissioned review into how the whole of the English education system is preparing students for the climate emergency and the ecological crisis
2. Inclusion of the climate emergency and ecological crisis in English teacher standards
3. An English Climate Emergency Education Act
4. A national climate emergency youth voice grant fund
5. A national Youth Climate Endowment Fund
6. All new state-funded educational buildings to be net zero carbon by 2020; all existing state-funded educational buildings to be net zero carbon by 2030.

Opportunities for an SDG focus in secondary schools

Joyce Hallam is a retired Head Teacher and was geography consultant and advisory group member for the local Global Learning Programme. **Contact:** Joyce.hallam@uwclub.net

In the NAEE journal, *Environmental Education* (Vol 120) Joyce Hallam explored the scope that the curriculum has for addressing the Sustainable Development Goals (SDGs). She subsequently wrote an NAEE blog setting out where in the GCSE specifications the SDGs could be found. What follows is a sample of statutory statements for secondary subjects which provide scope for developing concepts, ideas, knowledge, skills values and attitudes that relate directly to global citizenship education and have potential to provide a starting point for linking to, and exploring, the Goals.

GCSE Science GCSE specifications in science should enable students to:

- (understand) relationships in an ecosystem the interdependence of organisms in an ecosystem, including food webs and insect pollinated crops.
- (understand) changes in the environment which may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material.
- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively.
- (understand) positive and negative human interactions with ecosystems.
- (understand) Earth as a source of limited resources and the efficacy of recycling.
- (understand) the production of carbon dioxide by human activity and the impact on climate.
- (understand) fuels and energy resources.
- explain everyday and technological applications of science; evaluating associated personal, social, economic and environmental implications;

and making decisions based on the evaluation of evidence and arguments.



GCSE Geography GCSE specifications in geography should enable students to:

- deepen understanding of geographical processes, illuminating the impact of change and of complex people-environment interactions.
- develop and extend their knowledge of locations, places, environments and processes, and of different scales and social, political and cultural contexts (know geographical material).
- gain understanding of the interactions between people and environments, change in places and processes over space and time, and the inter-relationship between geographical phenomena at different scales and in different contexts (think like a geographer).
- (have) more detailed contextual knowledge of two countries of contemporary global significance, in addition to the UK.

- (understand) the causes and consequences of uneven development at global level as the background for considering the changing context of population, economy and society and of technological and political development in at least one poorer country or one that is within a newly emerging economy.



GCSE History GCSE specifications in history should enable students to:

- develop and extend their knowledge and understanding of: specified key events periods and societies in the history of their locality, Britain, and the wider world; and of the wide diversity of human experience.
- engage in historical enquiry to develop as independent learners and as critical and reflective thinkers.
- recognise that the discipline of history and a knowledge and understanding of the past helps them to understand their own identity and significant aspects of the world in which they live, and provides them with the basis for further wider learning and study.

The State of Environmental Education in Secondary Schools in England

A two-part report exploring the state of environmental education in secondary schools in England has been published by NAEE Fellow Melissa Glackin, and Heather King (of King's College London). The project was: **Understanding Environmental Education in Secondary Schools: *Where is it, what is it and what should the future be?*** Here's a brief summary.

Report 1: Policy Perspectives

Summary: The provision of environmental education in formal schooling is weakly supported by national policies. There is currently a lack of intention or ideological vision for environmental education explicitly articulated in England's education policy.

Recommendations:

- The government should establish a coherent national policy which sets out a vision for environmental education in secondary schools. The policy would shape future National Curriculum reforms and national assessments.
- The national policy should recognize the multiple dimensions of environmental education (e.g. *about, in and for* the environment) and ensure that all dimensions are given equal footing throughout a student's school career.
- Young people should be given the opportunity to think broadly about local and global environmental issues and encouraged to develop a sense of ownership and agency.

Report 2: The Practitioners' Perspective

Summary: The provision of environmental education in England is complex, contested and circular. Viewed as a

broad church, and a discipline which students find 'interesting', environmental education encompasses multiple topics and skills. Currently, however, environmental education has no defined home resulting in the subject 'falling through the gaps'.

Recommendations:

- Environmental education should be recognised in future Ofsted's school inspection framework.
- Effective environmental education needs to encompass equal opportunities for environmental activism, subject acquisition, and skill development.
- Environmental education should be recognised in the Teachers' Standards.
- Examination boards need to be encouraged to development and promote assessment procedures that capture equally environmental education's three underpinning values: social responsibility/activism in the environment, knowledge about the environment and skills for the environment.
- Senior leaders need to be encouraged to include environmental responsibility and activism in their mission statement/school aim and school operations policies and practices.

Working with Rotary

The Rotary / NAEE *Heart of England Save the planet from plastic* schools competition ended with an extensive exhibition that was launched by the Lord Mayor of Coventry, Councillor Linda Bingham, and the Rotary Heart of England District Governor, Saroj Bala Jaspal, at the end of June.

The exhibition comprised six large collages constructed from plastic bags and other plastic objects. A giant bottle depiction was made up of hundreds of Rotarian signatures pledging to cut down on the use of plastic. Twenty models of monsters and other sculptures made out of plastic bottles and objects were also on display. The competition received 200 entries from 12 schools, including 2 that have been awarded NAEE Kenrick

grants, and there were additional entries from Rotary supported groups (Rotakids).

During the event, there was also a 3-minute well researched presentation on plastic pollution issues by a Year 12 student from Bablake School. She had already won a regional Rotary International competition *Youth Speaks*.

The winning school from Kenilworth received a £100 prize and the *Leaper Trophy* sponsored by the JLR company; all other schools received participation certificates. The exhibition resulting from this very successful project is on display at Holy Trinity in Broadgate, Coventry until December 2019.

From a Cumbrian Headteacher

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School leaders have a moral as well as a statutory duty to ensure young people receive a well-rounded education which equips and prepares them for the world they inhabit. We have a duty to provide them with a knowledge and understanding of that world, with all its problems and challenges. Therefore, when young people are confronted with the increasingly compelling, authoritative and alarming science of climate change we should not be surprised at all when they demand to know why more is not being done. Nor should we be surprised when our students, instilled with the “British values” of democracy and freedom of speech declare their intentions to challenge people with political and economic power to take urgent and far-reaching action to avert the rapidly unfolding, global climate catastrophe.



Our duties as educators also include assisting our students to be good at communicating their ideas, politely but persuasively presenting their questions and concerns to those in authority. We have school councils to educate them in the processes of debate, consultation, surveying of opinion. When this results in students being motivated to join Greta Thunberg and other school strikers in protests, decrying leaders’ and authorities’ inaction in tackling the root causes of climate change head-on, how do we reconcile this with a school’s responsibility to keep them safe and impress upon

them the vital importance of their school attendance?

With this in mind, I was determined to find a middle way, and hit upon the idea of holding the “Cumbria Youth Climate Change Summit”. A few moments, and a phone call to the University of Cumbria later, we had a date and venue. Twenty-nine schools and a home-school network answered the call, with each invited to send two young people to represent the views of peers in a two minute presentation, which would be heard by people in authority and the local print and broadcast media.

Attending to hear what the young people had to say were the county councillor with responsibility for environment and the leader of Carlisle City Council; the event also attracted considerable media coverage, particularly since it coincided with a week of protest by Extinction Revolution and further student strikes. Additionally, pupils wrote to Michael Gove inviting him to attend or send a DEFRA representative, but we did not get a response.

The summit surpassed my high hopes and expectations. The children spoke knowledgeably, with conviction and urgency, not only accurately identifying the seriousness and science of climate change but also suggesting what must now happen. A student from one of the secondary schools invited other delegates to meet during the break to discuss how they could continue to communicate and campaign beyond the event, and since the summit the newly formed Cumbria Youth Climate Change Alliance has been using social media to confer about their next steps.

EDUCATORS SHOULD GIVE YOUNG PEOPLE KNOWLEDGE AND UNDER-STANDING ABOUT CLIMATE CHANGE, BUT THEN ALLOW THEM TO SPEAK OUT ABOUT IT.

Delegates were unanimous in their hope to make the summit an annual event, the intention being to hold local politicians and businesses to account, but also to work together in the interim. The general feeling among the young delegates was that they felt well-informed about environmental science, were agreed that not enough is being done, and requested for school councils and their peers in general to be provided with further guidance about how and to whom they should communicate their demands. Specialist environmental educators attended and welcomed the chance to support schools and young people.

Educating young people about democracy is a statutory requirement. As a nation we have very high expectations about educational standards in terms of communication and understanding, discussion and debate, but we should also be facilitating an audience for our increasingly informed and articulate young people. To equip them with knowledge, but none of the empowerment necessary to act on that knowledge is a dereliction of duty. What I am proposing here is that educators use their obligations as the key to providing young people with an appropriate audience.

It is easy for the climate change dissembler to shrug and say “It won’t happen in my lifetime!” It is much harder for them to look a child in the eye and say the same, reprehensible words.

