PRIMARY GEOGRAPHY

Focus on sharing the planet

Number 103 | Autumn 2020

Geographical Association

Welcome to *Primary Geography*, the Geographical Association's journal for all Early Years and Primary teachers.

Every issue has a themed focus and contains practical, informative, inspiring and thought-provoking articles to support geography teaching and learning in the primary classroom each term. The issues are in print and online, and articles are supplemented with online extras such as worksheets, further ideas and PowerPoint presentations.

Making the most of your membership

Primary Plus membership not only gives you this highly regarded professional journal, you also get:

- discounts on GA CPD courses, conferences, publications and consultancy services
- Half-termly *Primary Updates* and free online access to every issue of *Primary Geography* dating back to 2004
- expert advice and guidance on how to raise attainment in geography in your school
- the latest news about geography, geography teaching and the curriculum in *GA Magazine*
- eligibility to register for the Primary Geography Quality Mark
- access to networking forums to exchange ideas and resources online and face-to-face
- opportunities to get involved, from writing journal articles to becoming an active volunteer.

Your membership is essential to give geography a trusted voice and real influence with key partners and government on matters that affect teachers of geography.

www.geography.org.uk

ALSO FROM THE GA...

Primary Geography CPD

New Primary Geography CPD Packs

The Geographical Association's (GA) CPD packs are designed for teachers to use in school with their colleagues. Each pack contains a range of practical activities that are flexible to suit your context, the amount of time that you have available and your school's needs. Titles available are: The Ofsted EIF, Enquiry and Critical Thinking, Fieldwork and Developing Geography.

Find out more about these and more at:
www.geography.org.uk/shop

Face-to-face and online CPD

There are lots of new CPD courses now available to book on our website! Our expert trainers can support you to develop your subject leadership, enhance literacy and numeracy at your school, embed fieldwork into your teaching and think critically. There's a wide range of courses available with dates throughout the year and with both face-to-face and digital courses available, there's something for everyone!

Find out more and book at:
www.geography.org.uk/Primary-courses

www.geography.org.uk

CONTENTS

NUMBER 103 | AUTUMN 2020

Editorial 4

Simon Collis introduces the Autumn 2020 issue

The Start Gallery: Focus on sharing our world 5

Members of the *Primary Geography* Editorial Board suggest activities you can use with your pupils on the theme of this issue

Geography *really* matters! 6

GA President 2019–20 **Gill Miller** explores how geography matters and how, as a geography community, we need to be much more assertive about the role geography can play in our society

Using 'Critical Thinking for Achievement' to challenge pupils' thinking 8

Alison Hamilton explains how a GA workshop introduced her to the concept of critical thinking and provided the inspiration for further developing a unit of work based on a year 6 Second World War fieldtrip

Space and place in a time of lockdown 10

Hazel Collis and **Simon Collis** explain how, when restricted to their immediate area with two young children, they needed to explore it through fresh eyes – to play and reinvent their sense of place

Paying attention to a more-than-human world 12

Sharon Witt and **Helen Clarke** consider ways pupils can be invited to pay attention to the more-than-human world

The *Primary Geography* Interview 14

Jonathan Drori, author of *Around the World in 80 Trees*, talks about his writing, trees, education and sharing our world

'Go with the flow': Using non-native species to show the interactions between human and physical geography 16

Katy Elsom explains how Emmaus School works to balance the pupils' curiosities with the development of a shared background knowledge through interesting and meaningful topics

Rewilding our school spaces 18

Fergus Beeley introduces the BLUE campaign, a simple, zero-cost action to rewild spaces

Bug burgers? The climate emergency and eating insects 20

Verity Jones outlines how a four-stage approach framed classroom discussion around the global food crisis and whether pupils would be prepared to eat insects rather than vertebrate meat

Views on the state of primary geography 22

The **collective of educators from the Charney Manor Primary Geography Conference 2020** offer comment on the state of primary geography as the basis for on-going debate

Fundamental British Values: geography's contribution to understanding difference 23

Fatima Pirbhai-Illich and **Fran Martin** explore how geography can be used to promote a positive understanding of difference

'We have far more in common than that which divides us' 26

Meghan Tipping shows how Philosophy for Children (P4C) can help pupils learn about challenging subjects

Listening to pupils' opinions: building up an Eco-Champions club 28

Leanne Chorekdjian-Jojaghaian shares thoughts from members of her school's extra-curricular Eco-Champions club

Introducing Oman as a geographical case study 30

Tamsin Murchie shows how a study visit to Sharqiya Sands in Oman inspired her to promote a better understanding of globally significant places

Democracy in the classroom 32

Lily Smith reports on her experience of taking part in a course that explored the relationship between democracy and diversity in the classroom

PG in practice 34

This page offers further ideas for using the contents of this issue of *Primary Geography* in practice in your classroom

FORTHCOMING ISSUE

Spring 2021: Empowering geography

Cover image: © Andre B Adur/Shutterstock.com
Guest Editor: Simon Collis
Senior Production Editor: Anna Grandfield
Design: Ledgard Jepson Ltd
Copy Editing: Diane Rolfe

ISSN 2046-0082 (print)
ISSN 2046-0090 (online)

The opinions expressed in this journal do not necessarily coincide with those of the Editor or the Geographical Association.

Safety Care has been taken to ensure that articles published in ***Primary Geography*** do not suggest practices that might be dangerous. However, the Geographical Association has not tested the activities described and can offer no guarantee of safety.

The Geographical Association is the leading subject association for all teachers of geography. Our charitable mission is to further geographical knowledge and understanding through education. Our journals, publications, professional events, website and local and online networks support teachers and share their ideas and practice. The GA represents the views of geography teachers and plays a leading role in public debate relating to geography and education.

The Geographical Association is a registered charity: no. 1135148. Company no. 07139068.

© The Geographical Association.
To request copyright permission please visit: www.geography.org.uk/Contact-Us

The *Primary Geography* Editorial Board:
Steve Rawlinson, Former GA President 2015–2016, (e-mail *geosteve7@live.co.uk*)

Ben Ballin, Freelance Educationalist, Birmingham

Simon Collis, Emmaus Primary School, Sheffield

Arthur Kelly, Senior Lecturer, University of Chester

Richard Hatwood, Head teacher, All Saints School, Gresford, and Trustee of the GA

Dr Paula Owens, Primary Champion and Consultant to the GA, Kent

Stephen Pickering, Senior Lecturer in Education, University of Worcester

Jane Whittle, International School of Como

Tessa Willy, Co-lead Primary PGCE, UCL Institute of Education

Dr Sharon Witt, Senior Lecturer, Institute of Education, University of Winchester

Corresponding Members: Lauren Campbell, Dr Margaret Mackintosh, Dr Richard Greenwood

Environmental policy
This journal is printed on paper from forests certified by the Forest Stewardship Council as sustainably managed.

GA strategic partners

EDITORIAL

SIMON COLLIS

My garden, shared

Shadows scud across the lawn. A muddied plastic dinosaur lies face down, discarded in a nest of earth. An insect settles on a seed head before weaving away. A bramble lurks, slowly extending its reach. Time and space intersect, in stems that stretch. Buds are swollen, waiting. The air smells dusty and threatens rain.

At a time of diminished horizons, where movements have become more accustomed to being restricted, I have found that my 'world' has shrunk and the view outside my window has become more important. Penelope Lively (2017) describes gardens as 'allusive, evocative… they are potent, flexible [and] can become a metaphor'.

At risk of such a metaphor becoming overwrought, in my garden I find a balance between the planned and unplanned, between the controlled and uncontrollable. At first it seems a neutral space, but closer examination proves otherwise. It is a site of overlapping territory between various birds and neighbourhood cats. Native plants nestle between cultivated species with origins and supply chains that encompass the globe. It embraces different uses – a halo of dirty sand surrounds our well-loved sandpit next to a clump of decapitated seedlings that served as an excellent slug buffet (much to my chagrin!). As much as I could try to avoid it, geography invades and inhabits this space.

Venturing out

Taking a simple visit to the local parade of shops, gaps yawn open between us – two-metre voids in space as we keep our distance. These empty spaces move, inhale and exhale as we go about our business. I find myself holding my breath as I enter doorways and other bottlenecks. Space needs constant negotiation.

I could be in 'Beszél' – one of two overlapping cities in China Miéville's profoundly geographical *The City and the City* (2009). In the novel, the geography of the two cities is messy and contested –

Guest Editor, Simon Collis.

districts or streets can be divided between the two and cannot be crossed. Inhabitants are instructed to unsee and ignore those not of their native city. Their perception is policed and rigorously enforced; unseeing is a conscious action.

Moving around my local area is now also a conscious action – it requires forethought and planning, at times almost a comedic dance. Reading the novel helps me to reflect; what conscious acts of unseeing do I participate in on a daily basis? What, or who, shares my space but falls between gaps that are left unexamined?

As news feeds get grimmer, I feel the need to unsee and actively ignore it. As a household, we take extra precautions and police ourselves more stringently. We know more but see less, retreating into the safety of insularity. I am grateful for a handful of emails from pupils and enjoy responding. I think more about those in my class who are not able to email. This pandemic does not treat us all equally – the vulnerable and discriminated against remain, yet are easy to unsee.

A new normal?

If I were teaching in school, I would be reading *Mouse Bird Snake Wolf* by David Almond (2013) with my class. Three children live in a world where the gods have become disinterested in their creations. They have left unfinished patches, some small and some vast. In the fable the children challenge each other to cross these blank spaces, eventually daring themselves to create their own animals. In my discussions with my class, I like to discuss the decisions the three characters make – they choose to make an animal that is in harmony with its environment or in discord, changing their world forever.

In this time of pause, perhaps we are presented with a similar choice – to decide whether to return to previous habits and patterns of behaviour or to craft something new. Hicks's (2018) call for a geography of hope seems all the more important. He shows us that sharing, listening, understanding and acting can lead to positive change. In the uncertainty that such a pandemic brings, these seem more important than ever.

Heavy rain has left the garden untended and unsupervised for the last week or so. There are several more decapitated stalks than there were before. Crowns of clover dot the lawn, visited by hoverflies. In my absence, a flower has bloomed.

References

Almond, D. (2013) *Mouse Bird Snake Wolf*. London: Walker.

Hicks, D. (2018) 'Why we still need a geography of hope', *Geography*, 103, 2, pp. 78–85.

Lively, P. (2017) *Life in the Garden*. London: Penguin.

Miéville, C. (2009) *The City and the City*. London: Macmillan.

WEB RESOURCES

View this issue, its online extras, and all issues of PG back to 2005 online: *www.geography.org.uk/Journals/Primary-Geography*

Download ideas for using the front cover: *www.geography.org.uk/Journals/Primary-Geography*

The START gallery

SHARING OUR WORLD

SHARON WITT, SIMON COLLIS, PAULA OWENS AND BEN BALLIN

Members of the *Primary Geography* Editorial Board suggest activities you can use with your pupils on the theme of this issue.

Placing 'ourselves' within the world

During some fieldwork, how could we explore the space that we inhabit differently? Slinkachu's (2008) street art uses miniature figures to inhabit our landscape and invites us to re-evaluate how our urban space is used. Offer pupils a miniature figure (younger pupils could use a Lego or Duplo figure, older pupils could use a miniature railway figure) when on a fieldtrip or exploring the school grounds. Find a space that invites the pupil to tell a story using the figure. How do they fit within the space? What story can be told? What textures, colours and patterns is the figure experiencing? This allows pupils to create miniature representations of the larger geographical ideas of space and place (Sobel, 2008).

Look up

Look Up! (Bryon, 2019) tells the story of Rocket, who dreams of going into space. She tells everyone around her about the Phoenix meteor shower. They gather in the local park and she even persuades her older brother Jamal to look up from his phone. As well as being a story about following your enthusiasm, it is also a story about noticing and attention. Challenge pupils to notice something new on their way to school or while travelling during a school visit. This could lead to a discussion about seasonal changes, leaf shapes, changes in land use or cranes dotting the skyline.

If pupils are challenged to look up, this could lead to enquiries about cloud formations, climate and weather. It could lead to discussions about how satellites are used to help us find our way and how stars were previously used in navigation.

Appreciating nature

Pupils pick a spot and sit very still to tune into the world around them. They use a compass to note which direction they are facing, and use a piece of paper folded diagonally to mark four quadrants and label them with N, E, S and W. After listening to and observing other moving beings, they name and describe in each appropriate quadrant what they have noticed: What it is, where it is (e.g. up in a branch, on a fence, in the air etc.), what it is doing, what noises it is making. Ask pupils to try and empathise with something they spot; what must it be like to be the snail in the damp shade?

Pupils can use their notes to draw an annotated map with themselves at the centre. This can be repeated, changing one variable (e.g. time of day, season, weather) and used to discuss what differences they have noticed.

Poetry and place 1

Poetry is an excellent way for pupils to express a sense of place and to develop their locational awareness. Kennings poems are Old English or Norse poems. They consist of two words per line that refer to the subject of the poem without referring to it directly. This means they can seem like very short riddles and invite the reader to re-evaluate the subject of the poem.

After choosing a subject, make a list of things that represent the subject in some way. Create a second list of things that are associated with the subject in some way. Pair these together to make lines for your poem. If you want pupils to experiment with these pairings, you could use sticky notes to give them the opportunity to try different pairs of words. Potts (2012) sets out this process in more detail with examples.

Poetry and place 2

A chatterbox or fortune teller (see instructions in Trevor and Owens, 2014) can be used to create a poem that reinforces directional understanding and a sense of place. Pupils label their fortune teller with N, S, E and W. They then face north and record their observations under the North flap, and repeat for each of the four compass points. These fortune tellers can then be used to assemble a list poem or a haiku-style poem, with the syllable pattern of 'To the North I see: / 7 syllable line / To the West I turn: / 7 syllable line etc. You could focus on different senses to create different sequences of poems.

References

Bryon, N. (2019) *Look Up!* London: Penguin.

Potts, D. (2012) *Land of the ocean noise: create your own kennings!* Available at: https://ypn.poetrysociety.org.uk/workshop/land-of-the-ocean-noise-create-your-own-kennings/ (accessed 18/7/2020).

Slinkachu (2008) *Little People in the City: The Street Art of Slinkachu*. London: Boxtree.

Sobel, D. (2008) *Childhood and Nature: Design Principles for Educators*. Portland, ME: Stenhouse Publishers.

Trevor, C. and Owens, P. (2014) 'Unfolding fieldwork', *Primary Geography*, 83, pp. 18–19.

For more ideas on activities using articles in this issue, see PG in Practice, page 34.

WEB RESOURCES

View this issue, its online extras, and all issues of PG back to 2005 online: *www.geography.org.uk/Journals/Primary-Geography*

Sharon Witt, Simon Collis, Paula Owens and Ben Ballin are members of the *Primary Geography* Editorial Board.

GEOGRAPHY *REALLY* MATTERS!

GILL MILLER

GA President 2019–20, Gill explores how geography matters and how, as a community, we need to be much more assertive about the role geography can play in our society.

First of all, may I nail my colours to the mast? As a former secondary school geographer and, through twists and turns, ending up in higher education, I stand in awe of primary colleagues. Your grasp of the breadth of disciplines required to give our pupils a 'good education' is remarkable. I hope that after weeks or months of home-schooling, parents around the country recognise and salute your expertise.

This issue of *Primary Geography*, focusing on sharing the planet, comes at a crucial time when the economic and political repercussions of nationalism and protectionism are making themselves felt across the world. It is important for our pupils' future that they embrace a global perspective and learn how they might contribute to a global society. Geography has a pivotal role in enabling pupils to understand how to share their world. There has never been a greater need to engage with geography. The more they know about our planet, the better prepared for the future they will be.

It is inevitable that primary colleagues are more 'comfortable' teaching some subjects rather than others, and there is heavy reliance on the skills and expertise of subject leaders. When it comes to geography, while specialists are passionate, inspired and enthusiastic, many primary teachers lack the confidence to teach the subject with such conviction. In addition, geography does not always have a strong voice in school curricula and the contribution that geography makes to our societies, including schools, can be unappreciated and undervalued.

Perhaps one reason for this is that geography does not have a simple identity. It is hard to sum up in a couple of sentences what geography is. Non-geographers may be excused for not really appreciating the breadth, depth or scope of the subject. For many years we have been attempting to define our subject. What is geography? What makes it so special, so central to learning, so applicable to the world? What is it that makes geographers so employable? Over the decades, from the early notions of geography as exploring the world around us, specialisms have evolved across porous borders with other disciplines. We now have meteorology, hydrology, ecology, planning and demography; and specialisms in development, culture, geopolitics, agriculture, etc., all valid studies of increasing depth and focus. No wonder that geography has been named the 'mother of all sciences'. But what makes geography special is its holistic nature. Ours is the only discipline that brings all these perspectives together to forge a coherent understanding of people and environment, Earth and society as a whole, be it at local, regional, national or global scales. Geography has evolved to combine depth and breadth of knowledge and understanding with analytical and practical skills, despite the general public still commonly assuming the subject is about 'colouring in maps' and 'capitals and flags'.

From an early age, pupils are curious about knowing and understanding what, where, why, when and how, but geography does more than just inform us about the world. It helps us to respond to situations and guides our actions. It gives us our sense of agency – we make geography, in the environment, in our communities; it is in our 'everyday', in the patterns and activities we create ourselves. Geography helps us to ask questions, to see issues from a range of perspectives, and to explore different solutions to problems. It teaches us to question, enquire, reason logically and evaluate independently; it provides opportunities to master life-long skills; and it fires our creativity and imagination. Geography nurtures our spatial awareness and takes us out into the real world to reap the benefits of outdoor learning.

Geography teaches us about justice, those social and environmental inequalities, combined with moral and ethical responsibilities, to which we should be sensitive. It plays a significant role in our social and personal well-being. It helps to make us who we are, shaping our beliefs, perspectives, values and attitudes. It contributes to our spiritual needs too, as we marvel at the awe and wonder of the physical environment and the places and artefacts made by other human beings. Geography has the power to transform us as individuals and encourage us to contribute to communities and societies as global citizens.

Geography is essentially about the here and now, as well as solving problems that will help us to be resilient and sustainable in the future. In our interconnected world, events across the globe lead us to explore different environments and cultures. The popularity of television travel programmes, environment and exploration documentaries reflects the interest and yearning for geographical knowledge and understanding among the general public, although perhaps they do not realise it. Although the messages from such programmes often have complex undertones, they are also simple and engaging. Of course, as an academic discipline, geography can be challenging and demanding, and many geographical concepts underpin our understanding, but images encourage our natural curiosity about the world around us, and make the subject accessible. As specialist geographers we have a role in encouraging colleagues to have confidence that geographical knowledge and understanding, while powerful, can also be simple, logical and well within their expertise and skill set.

There is help for specialist and non-specialist teachers alike in engaging with geography. The GA is, as they say, just a 'click' away. But first, teachers need to be persuaded of the central role that geography makes to their curriculum, their teaching, and pupils' learning.

We face a number of challenges as a geography community:

1. To recognise the contribution that geography makes to us as individuals
2. To increase public understanding of what geography is and why it matters
3. To enable policy-makers, decision-makers and officials at all levels of government to recognise the contribution that geography makes to their areas of work
4. To reinforce the place of geography within school curricula – a role for teachers, educators, and the whole geography community.

As primary geography colleagues, specialist or otherwise, we have a role to respond to all these challenges, but the fourth in particular. If we were in the marketing business, we would be informing the general public about our product, to increase their perception of its value and usefulness so that sales of the product

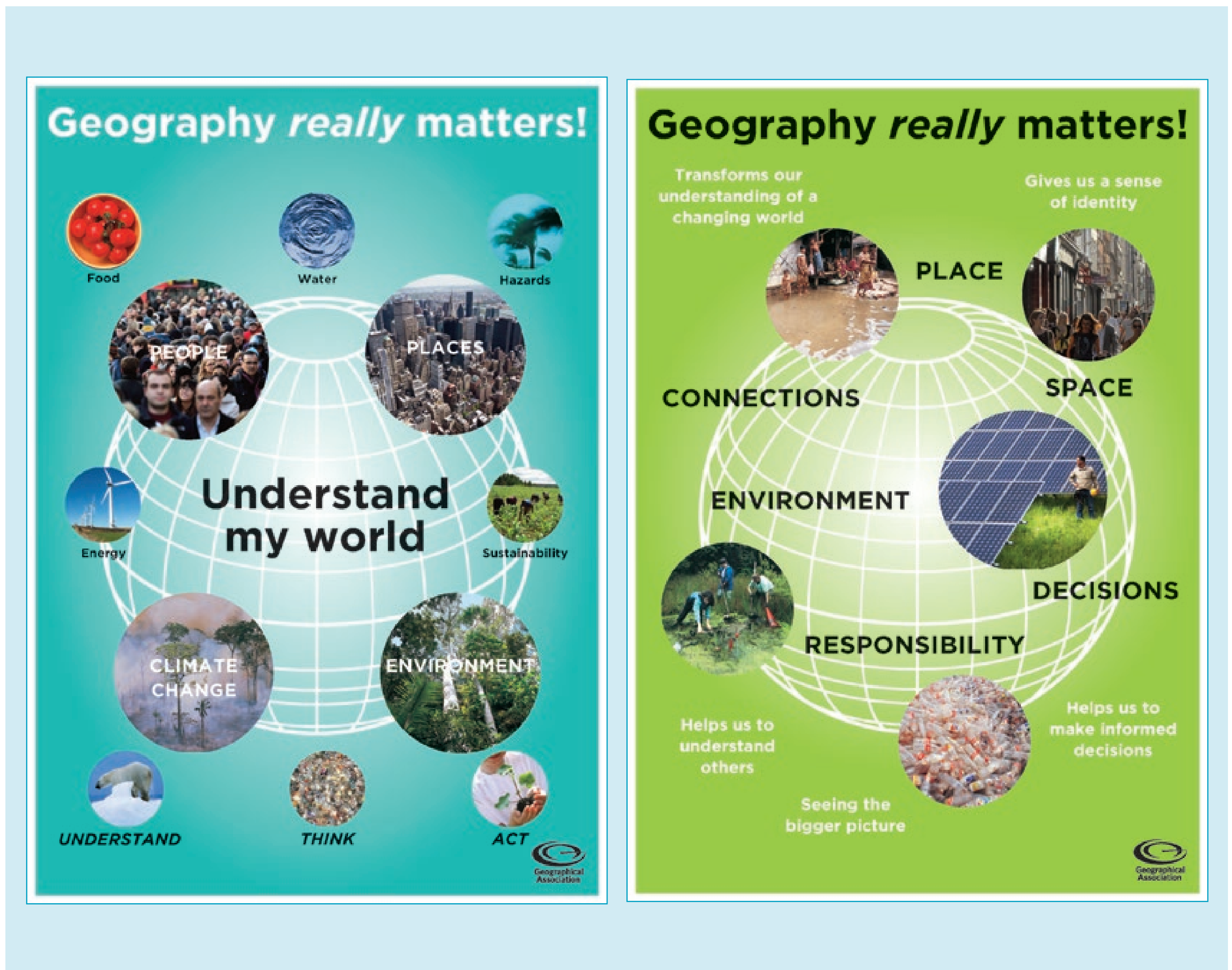


Figure 1: These downloadable posters can also be used on the front of the pupils' postcards.

increase. We can apply this process to geography. We need to advocate with colleagues, heads, school governors, parents and all stakeholders, about the value of geography, in order to increase their perception of its contribution to the curriculum. Only by informing others, and sharing our passion and engagement, will the profile of the subject increase. We do not have to look very far to find examples of change-makers who have found their voice and projected a message: Greta Thunberg, David Attenborough, Extinction Rebellion, Veganuary… Look at the impact and response when people are informed and inspired!

A number of the GA volunteer groups are taking action to demonstrate that geography really matters. One simple idea is to encourage pupils to think about what they are studying, how and why it is important, and then share it with others (see web panel). Pupils of any age can send a postcard to a decision-maker, Head teacher, school governor, local councillor, MP, planner or parent, with the message 'Geography really matters to me because…'. Two postcard designs can be downloaded and printed on card. There are also two downloadable posters, for primary and secondary settings (see Figure 1 and web panel), designed to help us be more outward facing.

As a geography community we need to be much more assertive about the role geography can play in our society. No one will do that for us. It is our responsibility to advocate for our subject, particularly throughout the wider primary education community. We must be prepared to stand up for geography and not be complacent. We have a mission – to enable colleagues to have the confidence to deliver, and benefit from, the riches that geography has to offer their pupils. There has never been a more important time to teach geography. We must make sure that everyone understands that geography *really* matters!

References

Barnett, C. (2013) 'Discussion: Global ethics, sustainability and partnership' in Butt, G. (ed) *Geography, Education and the Future*. London: Bloomsbury, pp. 240–3.

Blij, H, de (2012) *Why Geography Matters, More That Ever*. Oxford: OUP.

Jackson, P. (2018) '125 years of the Geographical Association', *Geography*, 103, 3, pp. 116–21.

Lambert, D. (2013) 'Reframing school geography: a capability approach' in Butt, G. (ed) *Geography Education and the Future*. London: Bloomsbury, pp. 127–40.

WEB RESOURCES

Sharing activity idea:
https://www.geography.org.uk/Welsh-Special-Interest-Group

Gill Miller is Senior Lecturer Emerita, Department of Geography and International Development, University of Chester, member of the GA Welsh Special Interest Group and President of the Geographical Association 2019-20.

USING ‘CRITICAL THINKING FOR ACHIEVEMENT’ TO CHALLENGE PUPILS’ THINKING

ALISON HAMILTON

In this article, Alison explains how a GA workshop introduced her to the concept of critical thinking and provided the inspiration for further developing a unit of work based on a year 6 Second World War fieldtrip.

The trip to Michelham Priory is a staple in our school: it gives our year 6 pupils a chance to experience life as an evacuee during the Second World War. It has always been a successful trip, but a workshop on ‘Critical Thinking for Achievement’ (see web panel) showed me that it could be even better. During the workshop, we were introduced to the three main strands of critical thinking: becoming better at thinking, making better sense of information and becoming a more open thinker (Figure 1). Using ideas shared by the workshop leader, Dr Paula Owens, and from teachers from other schools, we set out to bring critical thinking into our classrooms.

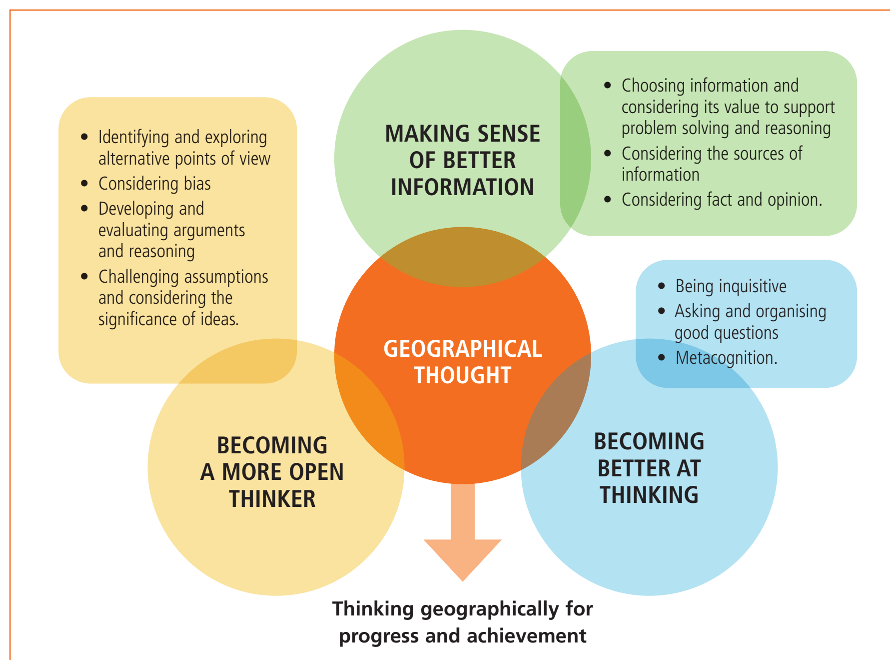


Figure 1: A model for critical thinking. Source: *https://www.geography.org.uk/Critical-thinking-for-achievement*

Figure 2: Pupils recreate an original photo of the evacuees outside Michelham Priory. Photo © Alison Hamilton

Getting started

First, the task was introduced: pupils were to write a letter as a child who had been evacuated to Michelham. Before the trip, we ensured that pupils had a secure knowledge and understanding of what life was like for children during the Second World War. During the visit, the pupils were given a guided tour of the site, starting at the gatehouse where they recreated arriving at such a grand house in a group photo (Figure 2). Pupils discussed the feelings of the evacuees as they travelled by steam train, were selected at the billeting office and transferred to the Priory; reiterating that for many evacuees, it was their first time experiencing the countryside.

A tour of the site allowed the pupils to discuss the emotions and experiences, including the sounds, sights and smells of the blacksmith’s forge and the importance of growing produce in the gardens. They talked about where they would enjoy playing if given freedom to explore, and the types of games and toys evacuees would have enjoyed in the 1940s.

Other activities included a ‘Make Do and Mend’ workshop where pupils made pompoms and lavender bags, wrote a postcard home in character using dip pens and, the highlight for pupils and staff alike, a meeting with a veteran evacuee meant pupils could ask questions to someone who actually experienced it first hand.

Activity 1: Using photos

Back in the classroom, pupils were shown a photo of an evacuees’ bedroom from Michelham Priory and used it to write a paragraph explaining how the evacuees spent their time. As teachers, we were intrigued to see how many of the pupils would be led by the photo; how many would describe the activities shown or would be reminded of that room and provide us with a description of the toys and games displayed.

A class discussion proved that this would not be the case. It was not long before other memories were sparked. The results were endless – from indoors to out, activities and feelings, positive experiences and negative – meaning pupils had a fantastic starting point to be able to write with knowledge and empathy.

Time for reflection included a discussion with the class about how influenced they had been by the photo. The majority agreed that it was good starting point for them to access their memories of the trip and that once they had thought about the room itself, they began to recall other details discovered during the visit. Another positive was the discussion itself and how sharing and collating their ideas together led to other experiences being recalled.

Activity 2: Creating a sense of place

We wanted the pupils to have a sense of place about Michelham Priory to support them in their writing. The first task here was for pupils to select one of 12 photos taken during the visit, which they thought represented being an evacuee at the Priory. With only two minutes to decide, their choice was very much down to 'gut feeling'. The second task gave the pupils an opportunity to explore this further, they were asked to add annotations around their chosen photo, thinking about:

1. What features, in the foreground and background, give clues to what life was like for the evacuee?
2. What emotions were being portrayed in the photo?
3. What can you infer about life at Michelham Priory from the photo?

Pupils spent the next two minutes sharing their thoughts with their neighbour and deciding on only one of their photos that they both agreed represented being an evacuee. This led to much discussion and persuasion, which some pupils found trickier than others. Each pair joined with another pair (into fours) and repeated the activity, then again as eights and so on until we were left with a whole-class discussion and one final photo that they all agreed represented life as an evacuee at the Priory.

Pupils reflected on the fact that they imagined the activity would become more difficult as more and more of the class became involved. However, they found it easier because they said they 'didn't feel like they could get it wrong in pairs or groups' and because they 'were not speaking as an individual' it took some of the pressure off. Pupil skills in debating improved as the activity progressed and more structured questions were asked; for example, 'Could you tell me how the layout of the tables in the dining room shows that dinner time was a positive time for the evacuees?' rather than, 'Why is your photograph better than mine?'.

And we included it in maths!

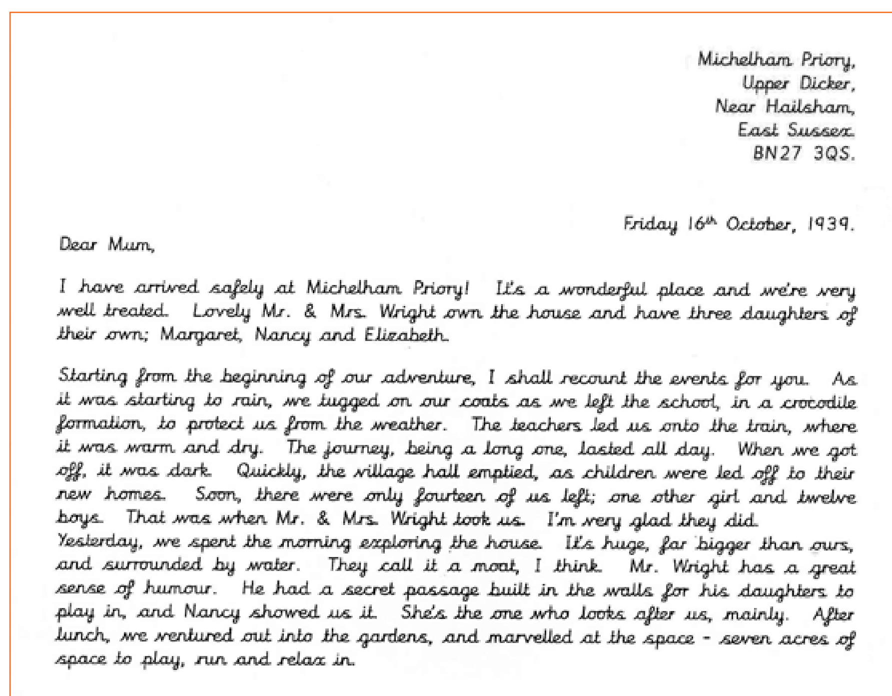
During the statistics topic, pupils used the GA questions generator grid (see web panel), to create questions about the evacuation data they were shown.

First, we established that I was not looking for mathematical problems created from the data. Instead, I wanted to understand what the data was telling me and to establish what was missing from my own knowledge and understanding, e.g. 'What was "school age" in the 1940s and is it different to now?' I particularly loved how, after pupils had thought about themselves in the scenario, they started to think about how I (as a parent and a teacher) might have been affected by evacuation, before moving onto considering other groups and individuals.

Equally impressive was that, as we were adding more questions, pupils were at the same time, answering many of them using the collective knowledge of the class. We used iPads to see if we could find answers on the internet, and pupils were encouraged to jot down anything they found interesting. I expected quite a few to have minimal notes, but was surprised to find that they all had most of the information and many had even worked in pairs to ensure that, between them, they had not missed anything.

The writing task

With the writing task fast approaching, time was given for pupils to read their notes and think about what they would write. Pupils were able to discuss what information they had gathered that could be included in their evacuee's letter home (Figure 3). Using the 'Question generator grid', pupils led a class discussion about what knowledge they had and any gaps they needed to fill. Time was then given to sharing these questions and, again, using each other to find the answer.



Michelham Priory,
Upper Dicker,
Near Hailsham,
East Sussex.
BN27 3QS.

Friday 16th October, 1939.

Dear Mum,

I have arrived safely at Michelham Priory! It's a wonderful place and we're very well treated. Lovely Mr. & Mrs. Wright own the house and have three daughters of their own; Margaret, Nancy and Elizabeth.

Starting from the beginning of our adventure, I shall recount the events for you. As it was starting to rain, we tugged on our coats as we left the school, in a crocodile formation, to protect us from the weather. The teachers led us onto the train, where it was warm and dry. The journey, being a long one, lasted all day. When we got off, it was dark. Quickly, the village hall emptied, as children were led off to their new homes. Soon, there were only fourteen of us left; one other girl and twelve boys. That was when Mr. & Mrs. Wright took us. I'm very glad they did.
Yesterday, we spent the morning exploring the house. It's huge, far bigger than ours, and surrounded by water. They call it a moat, I think. Mr. Wright has a great sense of humour. He had a secret passage built in the walls for his daughters to play in, and Nancy showed us it. She's the one who looks after us, mainly. After lunch, we ventured out into the gardens, and marvelled at the space - seven acres of space to play, run and relax in.

Figure 3: Extract from a pupil's letter home written in role as an evacuee at Michelham Priory.

Reflections

This was my team's first attempt at using critical thinking within our classroom practice. It meant spending valuable time re-planning something that worked well in the first place, so it was important to ask ourselves if it was worth the effort. Our reflection took account not only of the final written piece, but also of how the pupils worked throughout. It was unanimous – our pupils were already becoming better at thinking. They had started to listen to others better and respond with clear, focused questions as well as becoming more open with their thinking. With only this one unit of work, pupils were becoming more systematic in their enquiries.

With the focus now being on a knowledge-rich curriculum, the approach of using critical thinking is an ideal starting place – it helps pupils to become better at thinking, make better sense of information and be more open in their thinking.

WEB RESOURCES

Download questions generator:
https://www.geography.org.uk/Journals/Primary-Geography
GA 'Critical Thinking for Achievement':
https://www.geography.org.uk/Critical-thinking-for-achievement

Alison Hamilton is year 6 class teacher and Geography Lead at Chesswood Junior School, Worthing. She has a BSc in Environmental Science and PGCE in Secondary Geography.

SPACE AND PLACE IN A TIME OF LOCKDOWN

HAZEL COLLIS AND SIMON COLLIS

Hazel and Simon explain how, when restricted to their immediate area with two young children, they needed to explore it through fresh eyes – to play and reinvent their sense of place.

Writing this article during a time of pandemic, during which our physical movement has been curtailed, has pushed us to re-examine our relationship with space and how we share it. Gaps between people have widened, for instance, as we navigate around other people walking down the road, and the widely-spaced queues outside supermarkets stretch round the building. Immediate physical space has become more significant than perhaps it was before (Wolman, 2020).

As parents, having two pre-school children (Harriet and Billy) challenges us further. It has pressed us to redevelop our understanding of our local area. Does it also offer an opportunity – to deepen our understanding and appreciation of space and our place within it?

Developing a sense of place in a small area

Being restricted to our immediate area means that we need to explore it through fresh eyes – to play and reinvent our sense of place, to maintain our own interest and a sense of novelty. We wanted to incorporate a sense of playfulness in our place making, which was inspired by Witt and Clarke (2018). Tanner (2019) also highlights the importance of nurturing children's place attachments through the development of happy memories, giving a sense of security and belonging. This is particularly important in a time of widespread uncertainty.

Sobel (2008) identifies seven different play motifs to structure learning experiences for children, which we used in considering our playful encounters (Figure 1).

With this in mind, we tried several different activities to help our pre-school aged children to see their local area anew – so that they did not feel the loss of their wider freedom of movement.

Figure 1: Sobel's seven play motifs for structuring learning experiences. Source: Witt and Clarke, 2018. All photos © Sharon Witt and Helen Clarke except the donkey © Jennie Rainsford.

Figure 2: Harriet looks through her telescope. Photo © Simon Collis.

Activity 1: Telescope (hunting and gathering)

We created a telescope out of cardboard tubes, with coloured cellophane acting as the 'lens'. We then went for a walk in our local area. Without prompting, Harriet used the telescope to look for particular colours and shapes. The colour filter changed her perception of the world, and she enjoyed discussing what colours had changed with, and without, the telescope. Harriet was excited when the daffodils seemed to glow, but disappointed with how the post box blended into the background. Without realising it, the colour filter allowed us to experiment with the foreground and background, bringing unexpected objects into sharper relief. This refocusing allowed us, as parents, to consider how our gaze is not objective: we are 'trained' into what we do and do not notice (Rose, 1993).

Activity 2 – Sticky maps (hunting and gathering and following paths)

We supported Harriet to draw a simple line pathway map to represent the route of a walk in the local area. She chose the route and drew four landmarks as points on the way. Her chosen route and landmarks included a cherry tree in blossom and a hedge where we often find ladybirds – not typical markers on an adult-led walk, but vital points of interest to Harriet. We then attached double-sided sticky tape on her map over her pathway, allowing Harriet to collect

found objects as she travelled the route. To begin with, Harriet needed prompting to think about what she might like to collect, but she quickly became more independent. Harriet was only interested in collecting natural objects, such as flowers and feathers, ignoring man-made objects – after inspecting the latter she would move on without a word. Harriet decided to limit her collection to one of each object: 'Look I need that pretty daisy – oh no I've already got one' with the exception of stones. There is an infinite variety of pretty stones on an urban exploration! Harriet placed the objects with care in the order that they were found and had an understanding of the map showing progression of the expedition, but did not use her landmarks to guide placement relative to position on the route. She enjoyed choosing objects that attracted her, though Harriet jokingly talked about being sorry she 'couldn't stick on the ladybirds and bees' that she found. Following on from the activity, Harriet showed greater confidence in planning a route for an outing and great joy in collecting artefacts as we walk – she rarely returns home without a pocketful of 'treasures'.

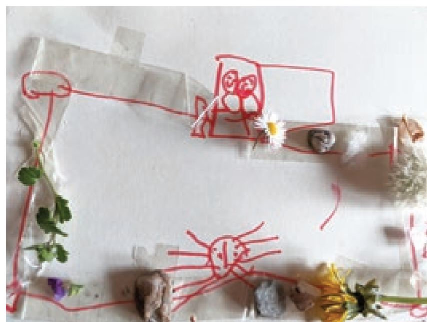


Figure 3: Harriet's completed sticky map. Photo © Simon Collis.

Figure 4: Harriet took great joy in the activity and developed her confidence. Photo © Simon Collis.

Activity 3 – Snail homes (animal allies and small world)

A chance discovery of four snails led to constructive, yet unplanned play. Harriet and Billy were fascinated by how the snails retracted into their shell in response to the children's movements. The children immediately resolved to help the snails. We provided a tray of soil and they went looking for grass and flowers for the snails. They noticed how the snails moved more easily over smooth surfaces, so laid some stones for the snails to crawl over. They wondered if the snails may be hungry, so shared some of their banana, thus echoing what Sobel (2008) describes about how animal allies can foster a sense of stewardship or empathy. Harriet then placed the snail house in a shaded part of the garden and visited it for the next couple of days to see if the snails had returned. She was quite disappointed when she did not see the snails again, so we talked about how snails were free range creatures and that in the storybook *Sophie's Snail* (King-Smith, 2015), Sophie is happy for her 'flocks and herds' to come and go as they pleased.

Figure 5: Harriet and Billy's snail home. Photo © Simon Collis.

Activity 4 – 6 Special places (making special places)

In this activity Harriet explored our garden and we encouraged her to consider what is special or significant to her. Using stickers she labelled six features of the garden that were important to her. Harriet quickly placed her stickers, but then had a re-think once she had used them up without including some important things, such as her 'den' behind the bushes. She tended to focus on features that gave her immediate enjoyment rather than necessarily linking it to her long-term use of space. These features included a photo of her favourite flower or a gap in the hedge that we had recently blocked off to prevent her younger brother from escaping into our neighbour's garden. This made Harriet's choices slightly more unpredictable – some of her special places, such as her sandpit, almost seemed taken for granted; and features important to adult use of the garden, such as the washing line, were completely ignored by her. When she had made a final decision she photographed them with Daddy's smartphone, deriving great satisfaction at her independence.

A renewed sense of place

Using Sobel's (2008) playful motifs has helped us, as parents, to provide the children with playful encounters in the local area. It has fostered their natural curiosity and developed an increasing familiarity with the spaces and places around them, which they would not necessarily have otherwise gained. Billy loves to visit and revisit special places in our area, including the garden with lots of grape hyacinths and a cement post with small stones embedded in it. Harriet has grown familiar with the wildlife in the neighbouring front gardens, noticing spider's webs that change from day-to-day. She has enjoyed creating stories about fairies playing on a particular rock at night. Activities relating to their own interests worked well and were returned to on subsequent occasions by the children independently. Unexpectedly, a deeper understanding of place and space for the children has led to a deeper appreciation for us too – giving us a renewed sense of place in the world and a greater appreciation of our local area.

References

King-Smith, D. (2015) *Sophie's Snail*. London: Walker Books.

Rose, G. (1993) *Feminism and Geography: The limits of geographical knowledge*. Cambridge: Polity Press.

Sobel, D. (2008) *Childhood and Nature: Design principles for educators*. Portland, ME: Stenhouse Publishers.

Tanner, J. (2019) 'Place attachments: a sense of security', *Primary Geography*, 99, pp. 8–10.

Witt, S. and Clarke, H. (2018) 'There's no place like gnome', *Primary Geography*, 95, pp. 10–14.

Wolman, D. (2020) *Amid a Pandemic, Geography Returns with a Vengeance*. Available at: https://www.wired.com/story/amid-pandemic-geography-returns-with-a-vengeance (accessed 8/6/2020).

Hazel Collis is a consultant paediatrician and Simon Collis is a primary school teacher and member of the *Primary Geography* Editorial Board. Here, both are writing in their capacity as parents of pre-school aged children.

PAYING ATTENTION TO A MORE-THAN-HUMAN WORLD

SHARON WITT AND HELEN CLARKE

In this article Sharon and Helen consider ways pupils can be invited to pay attention to the more-than-human world.

Investigating the more-than-human world requires a shift from thinking of geographical fieldwork spaces as sites for human action to places where geographical knowing and doing emerge in relation to an assemblage of things within a lively world. This article builds on the notion of human/more-than-human assemblages shared by Chris Martin (2018) in *Primary Geography*. These ideas, which have emerged from Sharon's doctoral study and our '@attention2place' work, invite geographers to participate in a shared world by exploring relational approaches to fieldwork.

Taking a different view

Times of climate change, species loss, decline of natural eco-systems and land degradation demand an educational response. These issues change what really matters and how geographers engage within fieldwork spaces. Our relational approach to fieldwork has been inspired by Taylor's (2017) notion that we should seek to avoid 'human rescue and salvation narratives', rather we should learn from pupils' 'low-key, ordinary, everyday' encounters with places as they can be 'generative and recuperative'.

Pupils develop attachments to place as they feel part of the world and want to look after it. Relational fieldwork in geography seeks to acknowledge and deepen existing relationships with the physical world and provide opportunities for pupils to engage with their senses and emotions to create and explore connections. Current National Curriculum requirements state that 'pupils will be taught… to use fieldwork to observe, measure and record' (DfE, 2013). A relational approach suggests that fieldwork spaces could be more than sites for knowledge extraction and skills practise, rather they may become sites of animation, engagement and involvement. This establishes geography practices where we learn *with* rather than learn *about* the more-than-human others in fieldwork spaces.

The liveliness of the more-than-human world

The term 'more-than-human' is inclusive of living organisms such as animals and plants and also, significantly, dimensions often considered inanimate including rocks, weather, imaginings, memories, dreams and associations. It may seem like a clumsy term, but more-than-human has been chosen carefully to honour diversity within the fieldwork space. Fieldwork spaces become places where the more-than-human/human interact. In these meeting places connections happen; knowledge, skills, values and emotions develop through stories, experiences, encounters and entanglements. More-than-human others, such as streams, fungi, trees and clouds have the capacity 'to animate, to act, to produce effects dramatic and subtle' (Bennett, 2010, p. 6) in relation with humans in fieldwork assemblages. Engaging with more-than-human dimensions encourages lively, spirited geographical explorations.

Invitations of place

Fieldwork is specific to the moment and requires both teachers and pupils to be open and attentive to notice what invitations are being offered within a place (Figure 1). Places invite us to engage in certain ways, encouraging geographers to be present in the physical world. Through being attentive to more-than-human invitations, it is hoped that pupils will ask questions, think differently, engage empathetically and attune to elements, building reciprocal relationships within fieldwork spaces.

Fieldwork spaces are full of wonder, potential and enchantment. They have much to teach us, if only we are willing to pay attention and engage with more-than-human invitations of place. In venturing on a relational fieldwork journey the teacher embraces serendipitous moments that emerge and provide opportunities for pupils to engage through their senses.

In a relational approach, a teacher's role is that of an 'animateur' – someone who models openness, curiosity, enthusiasm and attentiveness, valuing opportunities for learners to immerse themselves in natural environments through sensory exploration, thinking and creativity.

- The call of the…
- The smell of the…
- The sound of the…
- The sight of the…
- The touch of the…
- The taste of the…
- The movement of the…
- The feel of the…
- The colour of the…
- The push of the…
- The pull of the…

Figure 1: 'Thingly' invitations – a relational frame to support pupils' explorations.

Coming to know the world

What follows are examples of practice you may like to explore and adapt to build relations with fieldwork places.

Find your tree

The first activity is called 'Find your tree' (MacLellan, 1995). This activity supports pupils to establish a personal and unique connection with a tree within a woodland environment. Pupils can discover their own special tree by drawing along the main lines on the palm of their hand so they can see the pattern clearly. The teacher asks the pupils to find a tree whose branches have a similar pattern (Figure 2).

Figure 2: Pupils finding their unique hand pattern in nature. Photo © Sharon Witt.

A tree's view

Activities that invite pupils to take a different view can help to provide new perspectives. In Figure 3, eyes have been drawn on to hands to help pupils to think about the questions:

- What might the tree see?
- What might this tree feel?
- What local knowledge does this tree possess?

Figure 3: Drawn eyes help the pupils to make a real connection to their tree. Photo © Sharon Witt.

Pupils also considered questions they would like to ask the tree (Figure 4).

The pupils were fascinated by the age of their tree and wondered what sorts of events the tree might have witnessed given its proximity to a recently discovered Roman settlement. The tree-pupil encounters offered opportunities for the pupils to engage in sensory activities noticing the texture, colour and shape of their tree's bark, leaves and branches. Figure 5 shares the pupils' ideas about the perspective and responses a tree might make in response to their attention.

You can download for free a table of further relational activities that reveal ways teachers can foster geographical fieldwork spaces where pupils are brought into relationship with a more-than-human world (see web panel). This table offers ways to position pupils within a more-than-human world providing a context in which they are ready to accept the invitations of place. The responsive actions column is designed to support teachers as they nurture pupil/more-than-human relations.

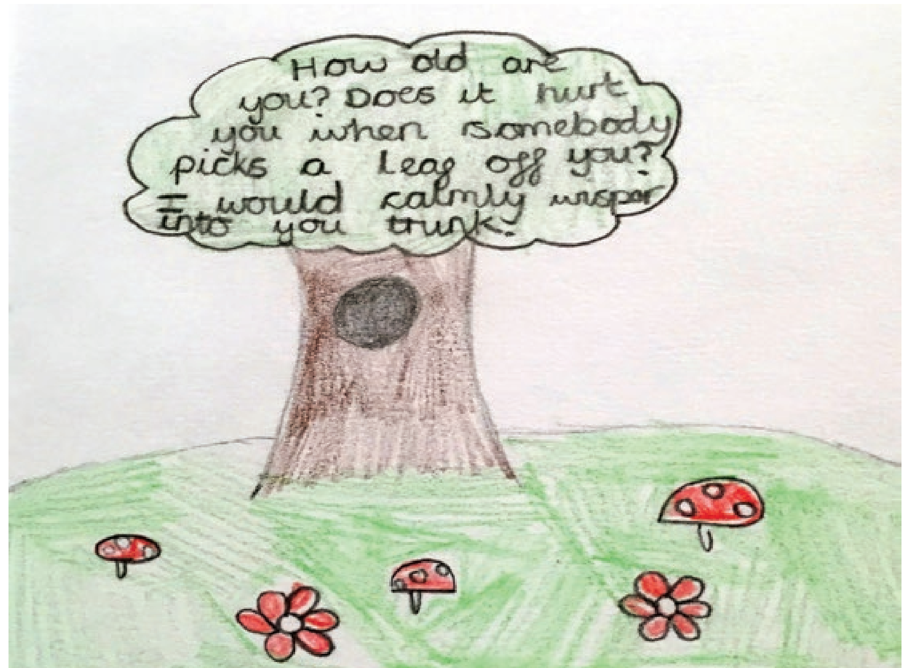


Figure 4: What questions would you like to ask a tree? Image © Chiara Gattuso.

What would the tree like to communicate?

'Please don't pull off my leaves! I get really hurt when people bother me. Thank you for taking care of me' (Anna, aged 11).

'Why do you chop my precious wood down? It makes me feel lonely' (Lucy, aged 10).

How did the tree feel after being hugged?

'Touched, peaceful, loved, respected, cheerful, safe' (Anna, aged 11).

'It felt valued... it didn't feel lonely' (Lucy, aged 10).

Figure 5: Thoughts of pupils following tree encounters (with thanks to Chiara Gattuso).

Conclusion

In our experience, focusing attention on the material and more-than-human dimensions within a fieldwork space can enhance and deepen pupils' relationships with local places. We recognise that relational encounters can be risky because you cannot be certain what thoughts, feelings, actions and possibilities may be present in the field. However, in a time of unprecedented global challenge it is time to make pupils' worldly encounters richer as well as place relational thinking and understanding at the heart of geography fieldwork practice. Take a moment to look at places differently; we would love to hear about your relational engagement with geographical fieldwork (see web panel).

Acknowledgement

With thanks to Chiara Gattuso, a teacher at St Peters School, Bournemouth.

References

Bennett, J. (2010) *Vibrant Matter: A political ecology of things*. Durham, NC: Duke University Press.

DfE (2013) *The National Curriculum for England*. Available at: https://www.gov.uk/government/collections/national-curriculum (accessed 9/6/2020).

MacLellan, G. (1995) *Talking to the Earth*. Milverton: Capall Bann.

Martin, C. (2018) 'Weaving phones into trees', *Primary Geography*, 95, pp. 16–17.

Taylor, A. (2017) 'Beyond stewardship: common world pedagogies for the Anthropocene', *Environmental Education Research*, 23, 10, pp. 1448–61.

WEB RESOURCES

Download further relational activities: *https://www.geography.org.uk/Journals/Primary-Geography*

Post your stories: *@attention2place*

Sharon Witt and Helen Clarke are researchers in place attention and responsiveness, relational material encounters with landscapes seeking to connect pupils to environments.

THE PRIMARY GEOGRAPHY INTERVIEW

JONATHAN DRORI

Jonathan Drori, author of *Around the World in 80 Trees*, talks about his writing, trees, education and sharing the planet.

What prompted you to write your latest book?

I love trees, of course, and have done ever since my parents took my brother and me to Kew Gardens practically every week and told us the most wonderful stories about them. I wanted to write something accessible and enjoyable that would entwine science, history and culture. I also wanted to make sure that even people who are expert in those areas might find some surprises.

One of the things I loved about geography at school and makes me proud to be a Fellow of the Royal Geographical Society, is the wonderful, interdisciplinary nature of the subject. There are so many hooks to use to grab children's attention! And I suppose that's a quality that I want *Around the World in 80 Trees* and its forthcoming successor, *Around the World in 80 Plants*, to have.

What are your memories of school geography?

Ha! Four tides a day in Southampton. That sheep are prone to foot-rot and that glaciers give us terminal moraine and drumlins. Oh, and U-shaped valleys. I went to Iceland recently and though there were hardly any trees to speak of (boo!), the u-shaped valleys were a delightful reminder of school geography lessons (hurrah!). I've always enjoyed maps and our nerdy family holidays involved a lot of tramping around with OS and geological survey maps, which meant that there was plenty in geography lessons that felt familiar.

Jonathan Drori with a quiver tree.

What is your favourite tree?

That's like asking, 'Who is your favourite child?'! For sheer chutzpah, I love the quiver tree, the National Tree of Namibia, which thrives in the desert and invites one to stroke it by having an odd powdery waxy surface (which protects it from harsh UV light). I love the cedar of Lebanon, for its fabulous scent and its incredible history. Cedars were the forest trees described in the Epic of Gilgamesh, written on clay tablets 4500 years ago, and were already being felled unsustainably for housing and boat-building. There was a really spectacular one that I remember wistfully from Richmond Park, which got struck and killed by lightning.

What about your favourite place(s) to visit to encounter nature/the natural world?

There's an all-too-rare flower meadow in Dorset that every year makes me grin with delight. It's absolutely bursting with plant species and buzzing with insects. The butterflies there are just stunning. The most biodiverse places I ever get to

are, of course, botanic gardens and the UK is blessed with some terrific ones. Further afield, Madagascar, having been isolated from mainland Africa so long ago, has incredible endemic flora and fauna. The lemurs, who only see in blue and green, have co-evolved with plants like the Traveller's 'Palm' that have glorious blue seeds.

Do you think there is a need for teachers to connect pupils with the natural world?

A leading question, m'lud! Teachers need to connect students to the natural world for so many reasons! If they feel a connection, they will value it. If they have a connection, there is good evidence that they will be healthier, mentally and physically, as a result. And the natural world is a fundamental part of our existence, part of what we are as humans.

How do you think teachers could do this?

I'm no expert in this but I remember teachers who really inspired my curiosity, pushed me to ask questions that were completely outside and beyond the lesson, made me feel that there was no such thing as a 'dumb question', conveyed to me their infectious enthusiasm. All of those things helped.

I had a primary school teacher - I wish I could remember her name – who took us to Richmond Park and had us all collect anything that seemed interesting; a bit of deer antler, some rabbit poo, various leaves and bits of grass, sweet chestnuts, various alarming looking fungi. Then our class did projects on everything - we had to find out as much as we possibly could about the thing we chose. One girl did the most fantastic spore prints. Someone else did their project on all the different kinds of poo. I think I did something about the way that bones grow. It was properly interdisciplinary and our classroom was absolutely stuffed with artefacts and commentary.

What role do you think tree planting could have in combating the challenges we face?

Planting trees is helpful for a whole mass of reasons. Trees are mostly made from carbon dioxide from the air and water from the roots, which photosynthesis cunningly turns into wood and leaves and things. So, planting lots of trees takes lots of carbon dioxide out of the air. That's good because carbon dioxide is a greenhouse gas and a major pollutant. Planting lots of trees also helps the water cycle, stabilising rainfall

The Eden Project. Photo © Richard Szwejkowski.

and also preventing flooding. And the act of planting trees makes people appreciate them more and therefore more likely to protect them. Woodlands are reservoirs of biodiversity, so planting trees is good for little critters, good for bigger critters and good for us. I could go on…

Tell me about your role as a Trustee of the Eden Project.

Being a Trustee of a charity is both a privilege and a responsibility. When I was on the Board of Kew Gardens, I felt that I was bringing know-how (in technology and media) that was useful but I also learned a massive amount about plant science and the business of running a public attraction.

I've felt similarly at Eden. As Trustees it's our job to make sure that it's run properly and efficiently (it is!) and that we have the right plans for the future but it's also a wonderful opportunity to learn from colleagues who have different experience and expertise. It's wonderful to have so many school groups visiting the largest rainforest in captivity.

How could an interested teacher get involved in something similar?

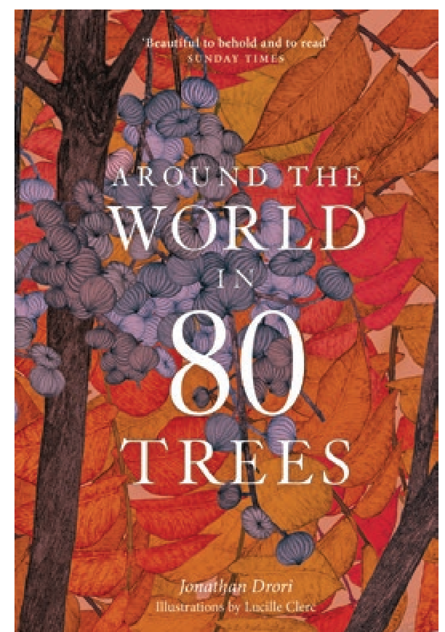
I think that there are lots of organisations that would benefit from the skills that teachers have. First, teachers really understand children extremely well and any organisation that deals with young people could potentially use that expertise. Also, teachers are used to explaining things clearly, planning their activities, dealing with a wide variety of different people (parents aren't always easy, I imagine!) These are all useful skills. The trick, and the hardest thing probably, is to be able to generalise from specific experience. But then again – that's the biggest challenge of teaching itself – to get pupils to be able to see the underlying patterns that connect different concepts and subjects! And isn't that interconnectedness one of the special things about geography?

How optimistic or pessimistic do you feel about the future?

Yikes. There's a lot to be pessimistic about at the moment, not least climate change and the need for Governments to act, and the polarisation of politics with (at the time of writing) a yawning gap in the middle where sensible, tolerant moderation should be. On the other hand, young people seem increasingly aware of these problems and want to do something about them. Will they gain enough influence sufficiently quickly to make the impact we need?

What do you think teachers need to teach primary school pupils about the future?

That the planet is theirs, and that they will need to decide what to do with it rather than deferring to oldsters like me.



***Around the World in 80 Trees* by Jonathan Drori is available in all good bookshops. *Primary Geography* readers can receive a 35% discount on hardback and paperback copies. Visit www.laurenceking.com and enter the code TREES35. Jon's second book, *Around the World in 80 Plants*, is due to be published in October 2020.**

'GO WITH THE FLOW': USING NON-NATIVE SPECIES TO SHOW THE INTERACTIONS BETWEEN HUMAN AND PHYSICAL GEOGRAPHY

KATY ELSOM

In this article Katy explains how Emmaus Primary School works to balance the pupils' curiosities with the development of a shared background knowledge through interesting and meaningful topics.

At Emmaus School in Sheffield, we aim to facilitate a 'Curriculum of Enquiry' with a common sequence of lessons. This begins with a focus on sharing specific background knowledge. Pupils then further their own learning by establishing specific topics they are interested in and subsequent lesson planning is based around these interests. This gives the pupils the opportunity to acquire the necessary background knowledge, and then apply it to something that they find interesting and meaningful. The culmination of the topic is a 'Showcase', where pupils are given the opportunity to communicate what they have learned to staff, other pupils and parents/carers.

Go with the flow

This curriculum of enquiry was trialled at the start of the 2018–19 academic year through our school's cross-curricular 'Go with the flow' topic, which focuses on the geography of rivers, the water cycle and river habitats, as detailed in the year 3/4 science curriculum. Five lessons were planned (covering the water cycle, features of a river, erosion and deposition, river habitats, and food chains) to give the pupils the key knowledge they would need to further their own learning. This included a visit to the National Trust's Longshaw Estate in the Peak District National Park, to measure and investigate rivers first hand.

After these five sessions, pupils were asked to name areas of the topic they were the most interested in, and encouraged to pose 'I wonder…' questions, which we then used to plan the rest of the topic. This allowed pupils to apply their shared background knowledge into a specific context that interested them. Across three classes, three different areas of study were chosen: fungi, estuarine habitats, and food chains/river habitats. My own class explored food chains and I focused on how food chains can be impacted by the introduction of invasive non-native species, an ongoing issue that is threatening UK river habitats. It was also a good opportunity to show the pupils how human and physical geography are closely interconnected.

Introducing the signal crayfish

Specifically, we focused on the introduction of the signal crayfish, a North American species that was introduced to Europe in the 1970s to be harvested commercially (Booy *et al.*, no date; and Figure 1). Before proceeding, I had to ensure that the pupils' interests were balanced against the need to cover the key requirements of the science and geography curriculum for year 3/4 (DfE, 2013). I therefore consulted the National Curriculum to inform my planning and adapted this according to the biology and geography of the signal crayfish.

First, we looked at the specific biology of the signal crayfish. The pupils learned about the features of crustaceans by studying a picture of a crayfish and asking questions about the different body parts, including the name and purpose of each one. A guided class discussion ensued so that pupils could use the knowledge they had about their own body to help them name the features of the crustacean body, despite the differences. Next, pupils were explicitly introduced to the correct scientific name of each feature. By this point, the pupils were well equipped to sort and classify organisms based on their features. In order to do this, we looked broadly at freshwater invertebrates and labelled the features of both a great diving beetle and a signal crayfish. Using this knowledge, the pupils were then able to make comparisons between the signal crayfish and other freshwater organisms. Within the biology of the signal crayfish, it was essential to explore its habitat and survival mechanisms. This led to pupils placing the crayfish in a freshwater food chain; some higher-attaining pupils were able to create food webs, thus further demonstrating the co-dependence of organisms for survival of the river habitat.

The impact of invasion

We spent subsequent lessons exploring the impact that the signal crayfish, as an invasive species, has had on UK river habitats since its introduction. Pupils were able to use their knowledge of food chains to predict how it had impacted on populations of other river species as well as predator/prey interactions. I planned one lesson around the spread of 'crayfish plague' to native species causing a decline in the white-clawed crayfish. This lesson looked closely at how crayfish plague is transmitted, the symptoms and the impact that it can have on local populations of crayfish. I provided pupils with the information and key words with which to explain, in their own words, the dangers and consequences of crayfish plague.

Using the signal crayfish as a case study, pupils were able to understand the impact of non-native species, how they can influence the physical geography of the river and have an economic impact. This explicit teaching of the issues caused by non-native species allowed pupils to see the connectedness of human and physical geography, rather than viewing them as two separate domains.

The final stage of the teaching sequence was for pupils to use the knowledge they had acquired and apply this to an end product to be showcased. I intended the showcase to allow pupils to demonstrate their knowledge around the impact that non-native species can have on a habitat; therefore, I directed the class to design their own Non-Native Species Alert.

To begin with, we looked at examples of these posters, and drew out the key information that they gave to people.

The Signal Crayfish

- Introduced to the UK in the 1970s for commercial farming and as an export for the Scandinavian market.
- Escaped from commercial fisheries and into UK waterways, threatening populations of the native white-clawed crayfish.
- Carries crayfish plague, which can be transmitted to native species.
- Burrows into riverbanks, compromising the structural integrity of the river habitat and increasing risk of sediment pollution.
- A more voracious predator than white-clawed crayfish, the signal crayfish will predate on anything, including salmon roe, potentially having an impact on commercial fisheries.
- Can be controlled by trapping, with the appropriate licence.

Figure 1: Background knowledge – the signal crayfish. Photo © Marek R Swadzba/Shutterstock.com.

This included:

- When and where the non-native species was introduced
- Why it was introduced
- Why it is dangerous
- The problems it can cause
- What to do if you find it.

Once pupils were confident of the information they needed to include, they were each given an unfamiliar aquatic non-native species to research. These included: the Chinese mitten crab, the American mink, the Zebra mussel and the New Zealand mud snail.

This research required direction because no suitable websites were available that would have allowed the pupils to access the information they needed, I therefore produced a fact sheet for each non-native species. These contained all the information pupils would need as well as some additional information and allowed pupils to choose the most relevant information for them.

Expert advice

The final product was a 'Non-Native Species Alert' poster, which gave key information about the potential threats caused and possible courses of action required for each individual species. Pupils became an 'expert' on the non-native species they had researched and, during the showcase, parents were directed to various pupils to ask for advice when they had discovered a particular species. Allowing pupils to focus specifically on a single species meant they had a purpose and were more likely to engage in the learning to improve their understanding of the outcome.

Reflections

This teaching sequence, using specific invasive species as case studies, allowed the pupils to direct their focus and remain engaged throughout. Giving pupils the role of an expert on a specific species provided each individual pupil with a purpose and meant they were more active in the learning process. However, there is always room for improvement. It would have been beneficial for the pupils to visit a river habitat once they had obtained knowledge of invasive species, because it would have allowed them to contextualise their learning. Also, arranging a visit from a local environmental organisation, such as the Don Catchment River Trust, would have given the pupils a better idea about how these problems can be tackled.

Using the river as the focal point, we were able to expand and develop the topic to teach both human and physical geography, as well as a significant proportion of the science curriculum. Teaching geography and science in this way allows pupils to appreciate the complexity of such subjects, rather than viewing each subject discretely (Kelly, 2013). Although this topic was not to explicitly teach pupils about the interconnectedness of human and physical geography, studying non-native species showed them how organisms (including humans) are dependent on each other for survival.

References

Booy, O., Wade, M. and White, V. (no date) *Signal Crayfish*. Available at: http://www.nonnativespecies.org/downloadDocument.cfm?id=68 (accessed 21/7/2020).

DfE (2013) *The National Curriculum for England*. Available at: https://www.gov.uk/government/collections/national-curriculum (accessed 21/7/2020).

Kelly, A. (2013) 'Geography enhancing Science' in Kelly, L. and Stead, D. (eds) *Enhancing Primary Science: Developing Effective Cross-Curricular Links*. London: McGraw Hill OUP, pp. 58–74.

WEB RESOURCES

Signal crayfish information:
https://www.waterways.org.uk/news_campaigns/campaigns/invasive_species/crayfish/signal_crayfish

Katy Elsom is a year 4 class teacher and history subject leader at Emmaus Catholic and C of E Primary School, Sheffield.

REWILDING OUR SCHOOL SPACES

FERGUS BEELEY

In this article, Fergus introduces the BLUE campaign, a simple, zero-cost action to rewild spaces.

When thinking of British ecosystems and habitats, we might picture lawns, parks, farmers' fields, ornamental gardens, football fields and road verges. Yet these are not natural habitats, they are areas so over-managed by humans during the last century that we have completely disguised the underlying natural habitats. Even the garden was once a concept of 'keeping out the wild', and now in most parts of the UK there is little 'wild' within the garden or beyond it. For instance, more than 95% of Gloucestershire's vast limestone grasslands have been lost since the 1930s.

The scale of the problem

Since the Second World War generations of people have grown up increasingly disconnected from these habitats; the disappearance of these wild places has gone unnoticed and unaddressed. Generations have become less familiar with the various plants, amphibians, reptiles, insects and mammals around them, and their children and grandchildren have been exponentially disconnected from the natural habitats that underlie farmers' fields and our towns and cities.

Recognition of this biodiversity (the number of different species in an area) loss is highlighted with the triennial *State of Nature* report (Hayhow *et al*., 2019). The report found that 41% of species in the UK have strong or moderate decreases in abundance since 1970, 15% of species are threatened with extinction and 2% are already extinct (Hayhow *et al*., 2019).

The BLUE campaign

The aim of the BLUE campaign is to promote a simple, zero-cost and time-saving solution: gardeners, schools and local authorities – anyone responsible for managing an area of 'green open space' – could set an area aside, allowing it to grow undisturbed, except for cutting the grass once a year in the winter. A blue heart made out of recycled materials is staked in the ground to claim the area as 'rewilded'.

The BLUE campaign was piloted in the town of Chipping Sudbury, South Gloucestershire, in 2016. Within a short time, blue hearts were becoming visible in parts of parks, gardens and on road verges across the county. At the time of writing (in April 2020), the blue heart is now used and recognised in every corner of Britain.

Reaching schools

Although not every school has the benefit of large grassed areas, most schools have a small area of short grass that could be set aside for rewilding. Even an area 3m x 5m in size, if left alone for grasses and other plants to grow, will attract wildlife. This creates an opportunity for pupils to experience nature on their doorstep – to see the difference between a grasshopper and a field cricket; to listen to the barely audible short-tailed field vole squeaking; or see Meadow brown butterflies skimming over waist-high wild grasses and flowers.

Making curriculum links with a rewilded area

Here are some ideas of how your pupils could use the school's rewilded area in their lessons (without disturbing the habitat itself).

- Explore nature: this offers a great opportunity for pupils to explore, observe and ask questions. Lines of enquiry could include identifying and classifying different plants (see FSC guides in web panel), observing them over time to see how the area changes. Pupils could look for evidence that animals are using the rewilded area by using magnifying glasses to find broken stems, animal passageways or footprints.
- Measure nature: a rewilded area can be used for mathematical enquiries. Provide classification guides to enable pupils to identify as many species as possible, then collate the results in graphs or charts. Pupils could compare the results with another area in the school grounds, or use the data to ask mathematical questions. In a well-established rewilded area, older pupils could collect data over a number of years, then identify possible trends – does the number of species or quantity of those species increase each year?
- Record nature: using the work of botanical artists, such as Maria Sibylla Merian or Elizabeth Blackwell (see web panel), as inspiration pupils could record what they see. They can be urged to look closely for fine details and use different artistic techniques and media to record what they notice about different species.

Figure 1: These butterfly species emerge at different times of year to feed on specific plants: (a) Common blue, (b) Marbled white, (c) Meadow brown, and (d) Red admiral. Can your pupils find out about their lifecycles and the plants they feed on? Photos © RichMcD Photography.

Rewilded spaces not wildflower spaces

Though there has been much discussion about sowing 'wildflower' seeds, many of the mixtures include non-native species and do not support the same level of insect life as naturally occurring British grassland meadows (Dines, 2019). Moreover, many wildflower species are not well suited to local soils. In rewilding, nature will select the most suitable seeds to grow, with many dormant grasses and plants present in a lawn already, just waiting to grow. Many species will time their flowering to suit the needs of emerging insects at a particular time of year (Figure 1; and see web panel). For example, dandelions appear in early April in vast numbers to coincide with the arrival of the newly emerged bumble bees. Few other flowers bloom as early as the dandelion and provide an essential first feed for many insects. Although some people may consider such plants as weeds, they make up vital habitats that increase biodiversity as food sources for increasingly rare moths and butterflies.

Sharing our space and building biodiversity

The BLUE campaign encourages schools to cordon off their rewilded area with string or tape from Easter onwards; the less disturbed it is the better. If the rewilded area is large enough, cut a path up the middle so pupils can access the long grass without disturbing it. As March progresses the grass will start to grow. By the end of April, the grass will be covered in dandelions and growing fast. Pupils can watch as every week new species of wildflower appear.

Pupils will find that the wildflowers in amongst the long grasses will not be the re-seeded bright poppies or ox-eye daisies that are often portrayed, but the more discreet little plants such as fox-and-cubs, selfheal and vetch. The grasses will reach waist height by July and many species of butterflies will start emerging from the grasses including Meadow browns, Tortoiseshells and Peacocks. The latter two species specifically need nettles on which to lay their eggs. Although you may see them visiting a flowering buddleia to gorge on the nectar, the stinging nettle is the food source for the caterpillars of Peacock and Tortoiseshell butterflies. No nettles? No eggs. No caterpillars.

The blue tit needs about 100 caterpillars every day to feed just one of its young. Female blue tits lay an average of ten eggs, requiring a daily consumption of 1000 caterpillars per day for just one blue tit nest. A breeding pair of sparrowhawks (a predator of small birds) will need to catch around 2200 blue tit-sized birds each year in order to breed. These figures indicate how important areas of long grass are as a habitat. They are not to be treated as a seeded 'wildflower bed', but as a micro-habitat for all plants and creatures.

Figure 2: The Common toad will spend the daytime in a rewilded area. Photo © RichMcD Photography.

Short-tailed (or field) voles eat grass shoots, feeding on the new shoots under the 'thatch' of the previous year's dead grass as it leans over in waves. The thatch protects the voles from many daytime predators, although sadly the squeaks of squabbling juveniles in July are very audible to curious cats. Shrews also need the long grass as they feed on numerous insects such as grasshoppers, crickets, flies and beetles. Frogs and toads also use the same grass thatch cover to remain damp and cool during the day (Figure 2) and, like voles, emerge at night to feed on the flies and moths. Grass snakes and slow worms need the long grass to hide and feed on the frogs and the voles.

Building connections

The connections between species that are allowed to build up in these micro-habitats make the need for rewilded spaces in every one of the 15 million gardens, thousands of school grounds, hundreds of kilometres of road verges and thousands of hectares of currently 'open green council space'.

The story of our loss is not just about biodiversity, it is also about the massive loss of biomass (the sheer volume of caterpillars, voles, insects and frogs). The biomass at the bottom of the food chain makes a habitat rich and allows the space to support a wider range of species. The value of the message in the BLUE campaign is that every school in the country can take part in this simple exercise by rewilding a very small part of their school grounds. This will allow pupils to get down on their knees and see some of the spectacular diversity of life on their own school doorstep.

References

Dines, T. (2019) *What is better? Planted 'meadows' or naturally occurring wildflowers?* Available at: https://www.plantlife.org.uk/uk/blog/What-is-better-Planted-meadows-or-naturally-occurring-wildflowers (accessed 9/6/2020).

Hayhow, D.B., Eaton, M.A., Stanbury, A.J., Burns, F., Kirby, W.B., Bailey, N., Beckmann, B., Bedford, J., Boersch-Supan, P.H., Coomber, F., Dennis, E.B., Dolman, S.J., Dunn, E., Hall, J., Harrower, C., Hatfield, J.H., Hawley, J., Haysom, K., Hughes, J., Johns, D.G., Mathews, F., McQuatters-Gollop, A., Noble, D.G., Outhwaite, C.L., Pearce-Higgins, J.W., Pescott, O.L., Powney, G.D. and Symes, N. (2019) *The State of Nature 2019*. Available at: https://nbn.org.uk/wp-content/uploads/2019/09/State-of-Nature-2019-UK-full-report.pdf (accessed 9/6/2020).

WEB RESOURCES

Blue campaign hub: *https://bluecampaignhub.com*

Botanical art and artists: *https://www.botanicalartandartists.com*

Butterfly (and moth) conservation: *https://butterfly-conservation.org*

FSC identification guides: *https://www.field-studies-council.org*

Fergus Beeley is a filmmaker who makes nature films with spidermovies.co.uk. He has worked at BBC's Natural History Unit and founded the BLUE campaign in 2014. The campaign is now partnered with Eco-Schools England and works together with them to deliver the 'biodiversity module' for the Eco-Schools Green Flag.

BUG BURGERS? THE CLIMATE EMERGENCY AND EATING INSECTS

VERITY JONES

Here, Verity outlines how a four-stage approach framed classroom discussion around the global food crisis and its associated socio-economic and environmental impacts. In the discussion pupils considered whether they would be prepared to eat insects rather than vertebrate meat.

The pupils in our classrooms are bombarded daily with doom and gloom stories about the state of the world, including food poverty, war, carbon emissions and water shortages. However, David Hicks (2018) and Hilary Whitehouse (2018) remind us that we should not dwell on these negative stories because young people can feel a sense of despair and powerlessness. Instead, we need to embrace pedagogies that will support young people to feel empowered to act as global citizens and begin to make steps to creating the future they want. We need to deliver what Hicks (2014) refers to as a 'geography of hope'; one in which crises are not just reported in our classrooms. These are carefully planned pedagogies that will support the possibility of behaviour change at a local level in order to build pupils' global understandings and encourage agency for long-term sustainable stewardship.

Hicks (2019) has outlined four critical stages that teachers can use to ensure effective pupil engagement with global crises. We should support:

1. the acquisition of appropriate knowledge of the issues
2. an exploration of young people's feeling towards these issues
3. the identification of relevant choices for positive change
4. opportunities to engage in appropriate action for change.

This four-stage approach was used to frame classroom discussion around the global food crisis and its associated socio-economic and environmental impacts in schools in Wales. In many classrooms, this is carried out using a lens of food miles or fair trade, but these pupils thought instead about the protein they eat. More specifically pupils were asked if they would eat insects rather than the usual vertebrate meat.

Acquisition of knowledge: what are the issues?

Before thinking about eating bugs, pupils need to be aware of some of the global problems surrounding food. The United Nation's Food and Agriculture Organisation (UNFAO, 2013) reports that by 2050 the planet's food requirements will outweigh its resources. We will need 42% more crop land, 120% more water and 70% more food in order to feed the planet's growing population. In part, this comes from the increase in demand for red meat, which is predicted to at least double in the same timeframe (Ranganathan and Waite, 2016). With increased red meat production comes greater intensification of crops and livestock farming and lower standards of animal welfare (e.g. Stricklin and Swanson, 1993; Wood-Gush and Vestergaard, 1989) and the environment (e.g. Wall and Beynon, 2012). Ruminant livestock, such as cattle, produce large quantities of methane. This gas is 25 times more powerful at trapping atmospheric heat than carbon dioxide and is a major concern with regard to global climate change. Looking at what you eat could be all doom and gloom for pupils, but how can teaching about edible insects help?

Exploration of feelings: 'I'm not sure I'd want to try that'

The World Health Organisation (WHO, 2013) has recognised entomophagy (eating edible insects) as a potential answer to many of the problems relating to global food production and consumption. In fact, edible insects can provide a high-protein, sustainable alternative to meat, and are already eaten by millions of people each day (van Huis *et al.*, 2013), but could the pupils in our classrooms really be convinced about trying and accepting insects as a tasty, nutritious and sustainable food choice?

Identifying choices: where… will… and what…?

I have been involved with schools in Wales who have been introducing a new insect- and plant-based alternative to meat from Bug Farm Foods Ltd called VEXo®. I have found pupils in primary schools ask three central questions: 'where do the insects come from?', 'will they make me ill if I eat them?' and 'what does this food look like?'.

If we are to support pupils in making choices for positive change then classroom opportunities should try to answer these central questions.

Where do edible insects come from?

When considering global food issues at the local level, pupils often look at food miles. While this is interesting and brings into question why we may want to eat local/seasonal produce, it does not clarify how the food was produced. The RSPCA Education Officers make free visits to schools. They work with pupils, supporting them to learn about the different conditions our farm livestock live in and how the choices we make when buying meat can make a difference to animal welfare, and talk about the five freedoms – the animal welfare rules to which the UK government works (see web panel). We could ask, if we are to eat them, should insects be afforded the same high standards?

An insect farm looks different from the grassy fields and cow sheds that may inhabit pupils' agricultural imaginations. At an insect farm everything is indoors with the temperature, humidity and feeding often controlled by computers and robots. The species of insect that are farmed for human food breed quickly and require very little space or water: this makes farming insects extremely efficient. For example, while approximately 22,000 litres of water is required to produce 1kg of beef, it takes just 1–10 litres of water to produce 1kg of edible insect protein, and insects release 99% fewer greenhouse gas emissions than cattle when converting their feed into edible protein (van Huis *et al.*, 2013).

Will eating insects make me ill?

For many pupils, the thought of eating insects can make them feel ill. However, unless you have an allergy to dust mites or shellfish (both contain similar allergens to insects due to their exoskeletons), the likelihood is that you will be fine eating insects. Some insects also contain traces of their feed, which may include gluten or soya, but this information will always be included on a product label. Insects farmed for human consumption in Europe must be farmed in accordance with EU food regulations (IPIFF, 2019) and all edible insects have to come with the correct paperwork, which includes a full Hazard Analysis Critical Control Points analysis.

Farmed insects are usually fed on genetically modified organism (GMO)-free and good manufacturing practices (GMP+) certified feed, and do not contain hormones, synthetic chemicals or antibiotics.

Microbiology testing is required to show that insects are safe for humans to eat. This can mean very little to young pupils. However, normalising the eating of insects can have a far bigger impact. For example, if you mention that in every 100g of chocolate there are 30+ insect parts (Gates, 2017) then eating insects does not seem such an alien thing to do.

What do edible insects really look like?

Research by Megido *et al.* (2016) found that the acceptance of new foods lies in processing, and work with Welsh schools has echoed this finding. More than 200 pupils agreed that they did not want to see legs, wings and antennae dangling from their food. In VEXo®, the insects are invisible to consumers because the product comes in a familiar format – in this case as a burger and bolognaise sauce (Figure 1).

Figure 1: Bug bolognaise looks very similar to standard meat-based bolognaise. Photo © Bug Farm Foods.

Taking action

Classrooms and school canteens can provide a context for pupils to rethink how our eating habits can be adapted to make a difference (Figure 2). While a shift to edible insects may not be the complete answer, as a single change in people's everyday consumption it could go some way towards making a larger positive difference to global food issues. There are a number of ways your school could make the shift; these include trying out insect-based recipes in food technology, setting up a sustainable foods snack shop at a school fete, requesting edible insect based foods in the canteen, or to start with an edible insect taster session (see web panel).

The increase in choice we have as consumers offers interesting points for discussion in the primary classroom. New opportunities for change to our eating habits are there, but it is up to us to allow pupils to explore and consider the consequences of such change.

Figure 2: Rethinking our eating habits encourages positive enquiry and reflection.

Acknowledgements

This article is based on research undertaken on behalf of Bug Farm Foods Ltd funded by Welsh Government and Innovate UK's Small Business Research Initiative project. Bug Farm Foods is developing a teaching resource to help schools embed edible insects into their teaching (see web panel).

References

Gates, R. (2017) *Insects: An edible field guide*. London: Ebury Press.

Hicks, D. (2019) 'Climate change: bringing the pieces together', *Teaching Geography*, 44, 1, pp. 20–3.

Hicks, D. (2018) 'Why we still need a geography of hope', *Geography*, 103, 2, pp. 78–85.

Hicks, D. (2014) 'A geography of hope', *Geography*, 99, 1, pp. 5–12.

van Huis, A., Van Itterbeeck, J., Klunder, H., Mertens, E., Halloran, A., Muir, G. and Vantomme, P. (2013) *Edible Insects: future prospects for food and feed security*. Available at: https://library.wur.nl/WebQuery/wurpubs/fulltext/258042 (accessed 9/6/2020).

IPIFF (2019) *Guide on good hygiene practices for European Union (EU) producers of insects as food and feed*. Available at: https://ipiff.org/wp-content/uploads/2019/12/IPIFF-Guide-on-Good-Hygiene-Practices.pdf (accessed 23/6/2020).

Megido, R., Gierts, C., Blecker, C., Brostaux, Y., Haubruge, É. and Franci, T. (2016) 'Consumer acceptance of insect-based alternative meat products in Western countries', *Food Quality and Preference*, 52, pp. 237–43.

Ranganathan, J. and Waite, R. (2016) *Sustainable diets: what you need to know*. Available at: http://www.wri.org/blog/2016/04/sustainable-diets-what-you-need-know-12-charts (accessed 9/6/2020).

Stricklin, W.R. and Swanson, J.C. (1993) 'Technology and animal agriculture', *Journal of Agricultural and Environmental Ethics*, 6, Special Supplement 1, pp. 67–80.

UNFAO (2013) *The State of Food and Agriculture: food systems for better nutrition*. Available at: http://www.fao.org/3/i3300e/i3300e00.htm (accessed 9/6/2020).

Wall, R. and Beynon, S.A. (2012) 'Area wide impact of macrocyclic lactone parasiticides in cattle dung', *Medical and Veterinary Entomology*, 26, pp. 1–8.

Whitehouse, H. (2018) 'A New Realism: a rationale for supporting children's climate activism' in Winograd, K. (ed) *Education in Times of Environmental Crisis*. Abingdon: Routledge.

WHO (2013) *World Health Report*. Available at: www.who.int/whr/en/ (accessed 9/6/2020).

Wood-Gush, D.G.M. and Vestergaard, K. (1989) 'Exploratory behaviour and the welfare of intensively kept animals', *Journal of Agricultural Ethics*, 2, pp. 161–9.

WEB RESOURCES

Bug Farm Foods, recipes and cooking ingredients: *www.bugfarmfoods.com* or email info@bugfarmfoods.com

RSPCA education resources: *https://education.rspca.org.uk/education/teachers*

Dr Verity Jones is a senior lecturer in Primary Education at University of the West of England, Bristol, with a research focus on sustainable futures.

VIEWS ON THE STATE OF PRIMARY GEOGRAPHY

CHARNEY MANOR PRIMARY GEOGRAPHY CONFERENCE 2020

The Charney delegates 2020. Photo © Richard Greenwood.

In this thinkpiece, the collective of educators from the Charney Manor Primary Geography Conference 2020 offer comment on the state of primary geography as the basis for on-going debate.

The Charney Manor Primary Geography Conference is a unique and independent forum that brings together practitioners from different walks of life with diverse experience of primary geography education in a variety of international settings. This statement is a synthesis based on more than 25 presentations made at the 2020 conference and is intended as our contribution to an on-going debate about geography education, particularly with regard to primary age children, and the future of the subject in a fast-changing world.

The Charney comment

As a group of over 30 primary teachers and educators with extensive experience in both formal and informal settings, from the UK and abroad, we re-affirm the essential contribution that geography makes to children's education. Not only does geography develop pupils' sense of belonging and place knowledge, it makes a unique contribution to their understanding of the world and how it is changing. At a time of growing planetary crisis, we believe a deep understanding of the reciprocal relationship between people and their environment is ever more important for primary age pupils, and that geographical concepts and spatial awareness provide a unique and essential perspective on current realities. More specifically:

- We believe that geography contributes to pupils' health and well-being as well as their cognitive and social development
- We value and seek more effectively to include the contributions that pupils bring and make to their geographical education
- We recognise that the geography curriculum has changed remarkably little over the last century and that there is now a need for new thinking and different strategies
- We see an on-going need to decolonise global learning and international understanding
- We reaffirm the importance of signature pedagogies such as fieldwork, mapwork and enquiry, which have stood the test of time and are the hallmark of effective, high-quality geography
- We believe there is significant potential for new approaches in geography that embrace notions such as divergence, disruption, enchantment, hope, imagination, creativity, criticality, humility and confident uncertainty
- We appreciate the significance and importance of progression and assessment in the primary geography curriculum that will benefit from continuing reflection and deeper, sharper definition and shaping.

Please do join us from 26-28 February 2021 for the 24th Primary Geography Conference and be part of the ongoing discussions. Contact Melanie Norman (mel@melanienorman.com) for further details.

© **Primary Geography** Autumn 2020

FUNDAMENTAL BRITISH VALUES: GEOGRAPHY'S CONTRIBUTION TO UNDERSTANDING DIFFERENCE

FATIMA PIRBHAI-ILLICH AND FRAN MARTIN

In this article, Fatima and Fran explore how geography and its key concepts can be used in the primary classroom to promote a positive understanding of difference.

What can geographical ideas and concepts bring to the duty of schools in the UK to promote Fundamental British Values (DfE, 2015)? We believe there are a number of risks in promoting fundamental values as British. These include: that what counts as 'British' can become both a stereotype and an exclusionary category; that 'British values' might be placed in opposition to the values of other groups; and that the core values identified in the guidance (DfE, 2014) might be portrayed as neutral rather than as open to interpretation. We therefore argue that how schools respond to this duty is determined by the motivations, knowledge and beliefs of the subject leaders and teachers who are tasked with implementing the duty at curriculum and classroom levels.

Teachers hold knowledge and beliefs about the nature of subjects as well as about how those subjects might contribute to pupils' learning. For this reason, this article focuses on teacher knowledge and understanding of geography, its key concepts, and how those concepts can contribute to positive understandings of difference.

A brief history of geography

As we have argued elsewhere (Martin and Pirbhai-Illich, 2017), geography came into being as part of the colonisation project. Its early function was to study and map the people and places colonised and to consider how they might benefit the British economy. In keeping with the way of thinking at that time, geography treated the peoples encountered as 'exotic' objects of study, creating racial categories as a means of classification based on visible differences. In order to justify the harms of colonisation, racial categories were placed in a hierarchy with white European at the top. It was a short step from here to propose that the ways of knowing and being associated with white Europeans are superior to the ways of knowing and being of other cultures.

Geography, the discipline, has developed over time, such that human geography now focuses on a greater understanding of the concepts of space and place, the people, things and events within them, and the interconnections between social systems, places and events. Rather than treating people and places as discrete objects, this approach assumes that everything is in relation from local through to global scales. In this way, a geographical lens can help us understand how the idea of Fundamental British Values (FBV) will be influenced by spatial processes, social network connections and the ways in which social systems operate, and how these change over space and time. For example, a core concept in the idea of FBV is the connection between what it means to be British and what constitutes a British identity. Geographically, Britain can be defined as much by its constituent countries as its borders. British identity relates to this location. However, 'who is a British citizen' is also linked to spatial processes of migration over time, social network connections that are the product of the British Empire and the subsequent relationships that operate at the individual, group, institutional and international scales.

It is possible to argue that geography education has not kept up with advances in the discipline. This is particularly the case in primary schools, where teachers of geography are mostly non-specialists and have had little time devoted to geography education in their Initial Teacher Education courses (Catling, 2017). When the colonial form of geography is used, it treats individuals and groups of people as objects that can be classified with clear boundaries and has the effect of separating people along lines of difference. This is a form of binary oppositional thinking that separates 'self' from 'other' and 'us' from 'them'; a process known as 'Othering' (Said, 1978).

The dangers of stereotypes and Othering

'Othering is not about liking or disliking someone. It is based on the conscious or unconscious assumption that a certain identified group poses a threat to the favoured group. It is largely driven by politicians and the media, as opposed to personal contact. Overwhelmingly, people don't "know" those that they are Othering' (Powell, 2017).

Othering is an expression of prejudice on the basis of group identities; it marginalises groups and engenders persistent inequality. Othering can take place across a range of dimensions of identity including race, ethnicity, culture, beliefs, religion, gender, socio-economic status, disability and sexual orientation. In the centuries when territorial colonisation was taking place, Othering was on the basis of race and ethnicity. The 'Other ways of being' encountered by white Europeans were treated with suspicion and labelled as 'backward', giving rise to cultural colonisation as the colonisers sought to eradicate those different ways of being through assimilation and acculturation (see web panel for more on this).

In the 21st century, Othering is evident in political and social arenas – particularly over issues around migration, immigration, refugees and terrorism. Citizens who have been targeted in the UK include the Black Caribbean population known as the 'Windrush Generation', who are positioned as undocumented citizens who should be deported, and the Muslim population who are positioned as terrorists (Dearden, 2018). We argue that it is not a coincidence that both communities are part of the group categorised as 'Black and Ethnic Minority' and that the racist ideology central to colonisation is at work in creating the UK as a space and place in which these communities do not belong. We further argue that this is reflected in the education system through how schools and learning are organised.

Geography education and spaces of Othering and belonging

Everybody has an occasion when they feel that they do not belong. Pupils starting school for the first time, going into a social situation to find that your ideas are diametrically opposed to those in the context. These feelings of not belonging are usually transitory. However, feelings of not belonging due to systemic Othering and exclusion of groups based on dimensions of their identity are usually persistent. The questions for teachers, therefore, are how can we create inclusive learning spaces that are inviting and welcoming to all dimensions of identity and that do not mirror the Othering processes of society?, and how can geographical concepts and ideas help us to do this?

The promotion of FBV focuses on four elements: democracy, the rule of law, individual liberty and mutual respect and acceptance[1] of different faiths and beliefs' (DfE, 2014, p. 5). It is expected that curriculum leaders and classroom teachers will meet this requirement through their provision of spiritual, moral, social and cultural (SMSC) education. We see this as problematic for two key reasons. First, the four elements are stated as if they are neutral ideas with little guidance on how they might be interpreted. Second, there is no reference to identity and belonging and yet, as we argue above, without such a focus there is the danger that FBV might be promoted in ways that are Othering. In a multicultural society what it means to be British, and the values that are thought to be fundamental to this aspect of identity, will vary from individual to individual and from community to community. Therefore, how is an account of public values created that is 'thick' enough to sustain the communal demands of citizenship yet 'thin' enough to satisfy liberal demands of individual liberty (Healey, 2018) without the two being seen to be in opposition?

To address this issue we recommend a plural and intercultural approach that invites the ways of being, doing, knowing and valuing of all those communities that make up multicultural Britain. This does not mean rejecting the way of life of the dominant white, mainstream, culture that governs how classrooms are organised, the knowledges that inform the curriculum, or the teaching approaches used. It means opening up these spaces for learning to include the knowledges and ways of being of cultures whose identities are seen as different from the mainstream. To do this we argue that teachers need to first look at their own identities and to understand the ways in which they might be 'Othering' in their practices (Figures 1 and 2). Reflecting on the questions in Figure 3 would be a starting point.

Figure 1: One student teacher's aesthetic response to developing a relational teacher identity.

Figure 2: A second student teacher's aesthetic response to developing a relational teacher identity.

- Who am I? How do the intersecting dimensions of my identity affect who I am and how I teach? (race, ethnicity, socio-economic status, religion, gender, ability, sexual orientation).
- To what extent do my choices over what and how I teach unconsciously reflect my own identity? (unconscious bias)
- To what extent do I consciously invite the ways of being that are different to my identity into the classroom?
- How can I create learning spaces of belonging rather than those that are alienating?
- How can I move away from the divisive (colonial) ways of thinking that marginalise and disenfranchise different groups?

Figure 3: Questions to start looking at our own identities.

Using geography to make the classroom a hospitable space

In our work, we have successfully used the concepts of invitation and hospitality in conjunction with the geographical concepts of space, place and boundaries to support teachers in their efforts to create classrooms of belonging. These ideas are summed up in Figure 4.

Schools and classrooms are not culturally neutral spaces. They are dominated by mainstream ways of being and knowing, and it is the teacher's job to make a conscious effort to create them as spaces of democracy and belonging. In our own practice we do this by thinking of the teacher-pupil relation as that of host-guest. Teachers have ownership over their classrooms in that they have the freedom to establish how they and the pupils relate to each other. From the pupils' perspective, they are entering into the teacher's space. If the teacher invites pupils in such a way that, over time, they develop a sense of shared ownership – and thus a sense of belonging – the space can become one of joint ownership. As host, the teacher would not only invite the pupil, but also welcome who the pupil is. Therefore, the teacher needs to get to know the pupils' families, community and place-based knowledges (rather than making assumptions about them based on racialised categorisations and stereotypes) and to incorporate these into the curriculum (Figure 5).

We argue that this is a form of hospitality in which the teacher/host identifies with the pupil/guest, not in order to benefit from that knowledge but to understand her/himself as a learner too. Learning becomes a joint process of exploration, which is responsive to the questions the pupils have as well as those that are derived from the statutory curriculum. The classroom becomes a space in which all pupils feel that they can actively participate and thrive as an equal contributing member and where they see difference reflected and integrated into the curriculum as normalised rather than 'exotic'. This may have the power to create potential feelings of belonging, which in turn could counter radicalisation, thus addressing two aspects of the 'prevent' duties: democracy, and mutual respect and acceptance of different faiths and beliefs.

Note

1. We have replaced the word 'tolerance' with 'acceptance' here because we see the former as being divisive. People who are different to the mainstream do not want to be tolerated; they want to be accepted for who they are.

Spaces for learning that are Othering	Spaces that represent the middle ground	Spaces for learning that create a sense of belonging
Teachers interact with pupils as if they are a homogenous group	Teachers interact with pupils as individuals	A variety of interactions are evident: teacher-pupil, pupil-teacher, pupil-pupil
Everybody is treated as if they are the same (erasing difference)	Differences in ability and knowledge are taken into account but may be viewed deficiently as a 'lack'	Pupils are invited to share differences in home and cultural ways of being and knowing. As everyone gets to know each other, the boundaries between different ways of being and doing are broken down
Teaching is a form of 'doing to', reliant on prescribed curriculum knowledge	Teachers are responsive to those differences	The curriculum is adjusted to take account of those different ways of being and knowing – difference is invited into both social and curriculum spaces. Rather than using an additive model of inclusion, an integrative model is created
Teachers hold all the power	Teachers retain the power because their worldviews unconsciously affect which differences to take into account and how they respond to those differences	Teachers become learners of pupils' cultural funds of knowledge; pupils become teachers of their funds of knowledge. The classroom becomes an inviting and hospitable space for all

Figure 4: Creating classrooms of belonging.

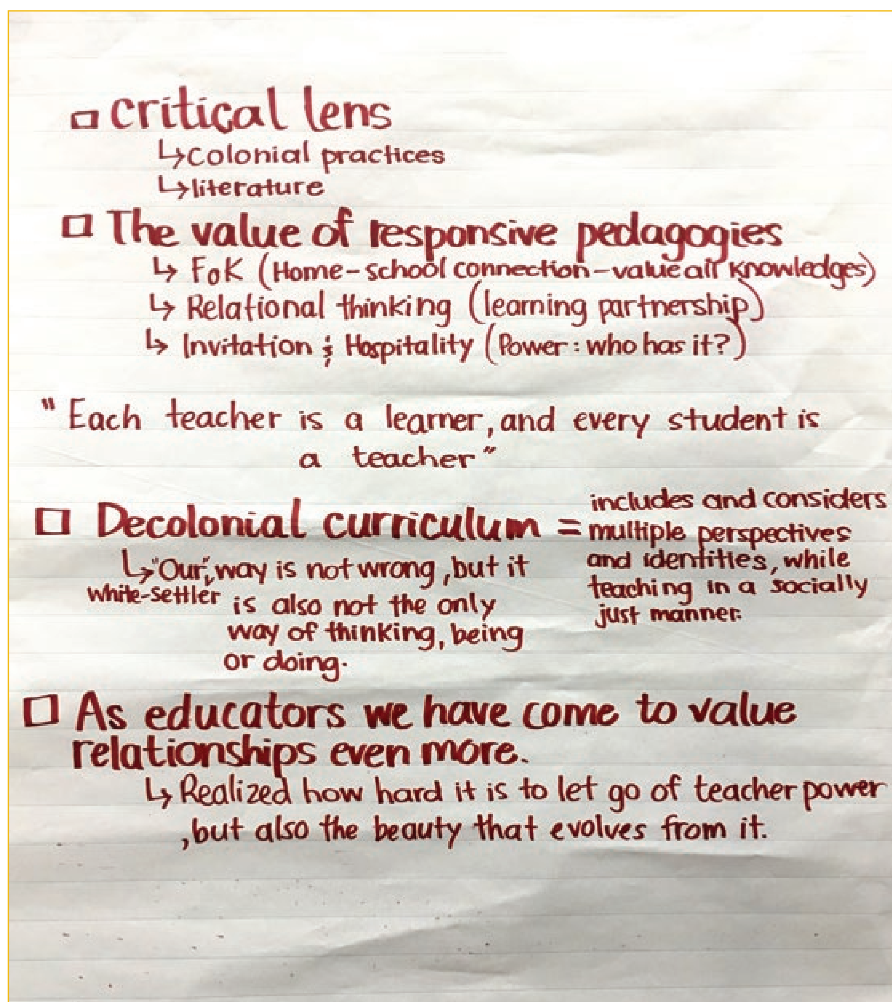


Figure 5: Student teachers' group reflection on creating hospitable classrooms.

References

Catling, S. (2017) 'Not nearly enough geography! University provision for England's pre-service primary teachers', *Journal of Geography in Higher Education*, 41, 3, pp. 434–58.

Dearden, L. (2018) *Islamophobia driving belief in myths about Muslims in British society, MPs say*. Available at: https://www.independent.co.uk/news/uk/home-news/islamophobia-muslims-islam-uk-myths-economy-social-advantage-mps-government-a8653216.html (accessed 28/7/2020)

DfE (2014) *Promoting fundamental British values as part of SMSC in schools*. Available at: https://www.gov.uk/government/publications/promoting-fundamental-british-values-through-smsc (accessed 28/7/2020).

Healey, M. (2019) 'Belonging, social cohesion and Fundamental British Values', *British Journal of Educational Studies*, 67, 4, pp. 423–38.

Martin, F. and Pirbhai-Illich, F. (2017) 'Places, spaces and boundaries: a critical look at the relational in geography classrooms' in Catling, S. (ed) *Reflections on Primary Geography, A Proceedings prepared for the 20th Charney Primary Geography Conference, 2017*. Sheffield: Register of Research in Primary Geography, pp. 140-46.

Powell, J.A. (2017) *Us vs them: the sinister techniques of 'Othering' – and how to avoid them*. Available at: https://www.theguardian.com/inequality/2017/nov/08/us-vs-them-the-sinister-techniques-of-othering-and-how-to-avoid-them (accessed 28/7/2020)

Said, E. (1978) *Orientalism*. Abingdon: Routledge and Kegan Paul.

WEB RESOURCES

More on cultural assimilation: *https://www.thoughtco.com/assimilation-definition-4149483*

Fatima Pirbhai-Illich is Professor of Language and Literacy Education at the University of Regina, Saskatchewan, Canada. Fran Martin is Honorary Research Fellow at the University of Exeter, UK.

'WE HAVE FAR MORE IN COMMON THAN THAT WHICH DIVIDES US'

MEGHAN TIPPING

In this article, Meghan shows how Philosophy for Children (P4C) can help pupils learn about challenging subjects.

On 16 June 2016, Jo Cox MP was murdered while conducting a surgery at a local public library. She was killed by Thomas Mair, who had links with far-right political groups in the UK and America. Cox was targeted as a vocal supporter of 'Remain' in the EU referendum and the social and economic advantages of immigration; beliefs that Mair saw as 'traitorous' to Britain. Cox's was the first killing of a sitting British MP in over 25 years (Cobain *et al.*, 2016) and it demonstrated how extremist beliefs could misrepresent and distort her own beliefs. Her posthumous charitable foundation (Jo Cox Foundation, 2019) challenges us to understand and look for what is common between us, however different our beliefs or opinions, but how do we address this challenge in the classroom?

Developing global citizens

Philosophy for Children (P4C) encourages teachers to facilitate dialogue in their classrooms (Figure 1). Using the P4C approach across the curriculum fosters passionate learners, eager to contest the world around them. Pupils explore complex concepts within philosophical enquiry, acquiring critical, creative, caring and collaborative thinking skills. Thinking critically enables pupils to spot and judge assumptions and make clear decisions – a vital life skill.

In 2018, I piloted the project 'Understanding Extremism and Terrorism' with year 6 pupils. It was created by Richard Gore (an experienced SAPERE P4C trainer and former school improvement adviser for community cohesion) and organised by DECSY (Development Education Centre South Yorkshire). It offered challenging, well-researched materials around four interlocking themes: exploring identity; understanding extremism and terrorism; responding to extremism and terrorism/developing shared values; and democracy and government. The project gave pupils the opportunity to think critically about sensitive issues and how they can bring about positive social change.

Philosophy for Children (P4C) allows pupils to develop their thinking and communications skills through structured philosophical enquiry. It is a democratic process that allows pupils to identify and choose philosophical questions. The teacher facilitates pupils' thinking through four types of thinking skills: creative, critical, collaborative and caring skills.

A P4C enquiry follows ten steps, which provides a structure so that pupils learn to listen and respect one another, challenge and deepen their own thoughts, while valuing and listening to the thoughts of others. These ten steps (some of which may be referred to within this article) are: warm up, presentation of stimulus, thinking time, question making, question airing, question choosing, first thoughts, building (the main discussion), final thoughts and review.

Figure 1: What is P4C? (see also web panel).

Identity

Throughout our lives we navigate so many labels as we try to decide who we are that we seem to forget that we are simply human. The project started by exploring what identity meant to the pupils. This was eye opening, because many pupils identified by their gender, faith, or by relationship, before their humanity. Following this, we read the poem 'Human Beings' by Adrian Mitchell (2004) as a stimulus and shared our 'first thoughts', which were listed as:

- 'we are all one'
- 'hatred'
- 'who we are and who we want to become'
- 'unite'
- 'unique'.

Pupils wrote a variety of questions then voted to consider the question, 'Why don't people appreciate being human?' in a whole-class philosophical discussion. The pupils offered reasons why humans may not appreciate being human. These included, 'they may be jealous of what others have' and 'they want wealth and are not happy if life does not go the way they want'. One pupil asked 'If you don't appreciate being human then what will you appreciate?', while another stated, 'I think people do not really appreciate being human because they do not really understand that you only have life once'. Pupils felt that usually an event that stops you in your tracks, such as someone passing away, would make you appreciate what you have. In summary, the pupils spoke about how humans do not think about appreciation in their daily lives, mainly because individuals compare what they have with what others have.

Challenging assumptions

Schools have an opportunity and a responsibility to ensure that pupils have a balanced view of the world. The P4C project reinforces the Government's PREVENT strategy (see web panel) and enables us to fulfil our role as educators.

Pupils explored the reasons why groups of people may take part in peaceful protest and how this may lead to violent protest. Their P4C enquiry began with a fictional scenario, where pupils were able to contest the actions of individuals who were protesting to save a local park. As the story unfolded, the protesters took increasingly forceful, violent measures to further their cause. Surprisingly, on their own accord, pupils mentioned the word 'terrorist' in relation to this part of the story. From the actions of these individuals, pupils discussed whether an act of violence or an act of terrorism had been committed. They discussed concepts such as 'choice', 'power', 'risk' and 'extremism'. As a final thought, we offered our views on the statements: It's right to break the law to protest against something you think is very unfair, and It's right to use violence to protest against something that you think is very unfair (Figure 2).

Real-life conflict

It was crucial to examine the nature of terrorism and the pieces that make up the 'terrorism jigsaw': what?, why?, how? and when? The positive, open-minded environment that P4C creates means pupils can ask questions without expecting an answer and gives teachers a good understanding of what they already know and what they want to know. Pupils asked wide-ranging questions: 'What is a terrorist?', 'Is it possible to be a terrorist and not hurt

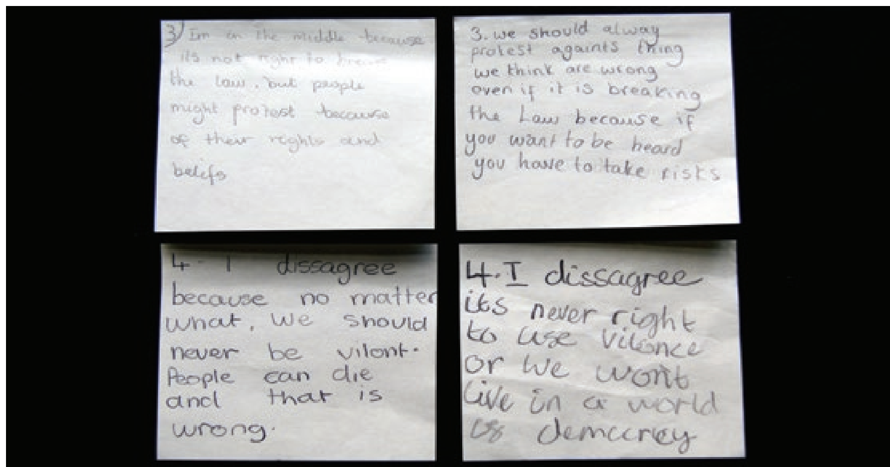


Figure 2: Pupils' thoughts on breaking the law and violence in protesting.

anyone?', 'Why target other people?', 'Who do terrorists look up to?' and 'What do people deserve if they perform terrorism?' As the project progressed, we explored these questions within real-life contexts, such as the Manchester Arena Bombing of 2017, the murder of Jo Cox, the Suffragette Movement and the IRA.

What is a terrorist?

Imagine asking pupils to draw a terrorist without allowing them to ask any questions. Cue: a lot of puzzled faces and hands itching to go up. Pupils did as they were asked, albeit reluctantly. The results were as expected, stereotypical views of balaclavas, beards, male, weapons and ripped clothing. Interestingly, there was one woman and one non-gendered terrorist amongst them. Once the pupils had drawn their 'terrorists' an abundance of hands shot up with questions such as – 'How do we know what one looks like?' and 'It's impossible to do Miss! I know we are making assumptions because we haven't even got any information'. This progressed into giving the pupils images of actual terrorists to see if they could decide by only looking at the image if the person was a terrorist or not. Obviously, the pupils could not do this accurately, and even when the information was given it was difficult for them to decide if some individuals (such as Nelson Mandela or Emmeline Pankhurst) were 'terrorists'. They were able to justify reasons for and against and came to the judgement that if you are fighting for human rights, your actions (within reason) could be seen as justifiable. Thinking activities like this really highlight the significance of stereotyping and what impact it can have in misinforming society.

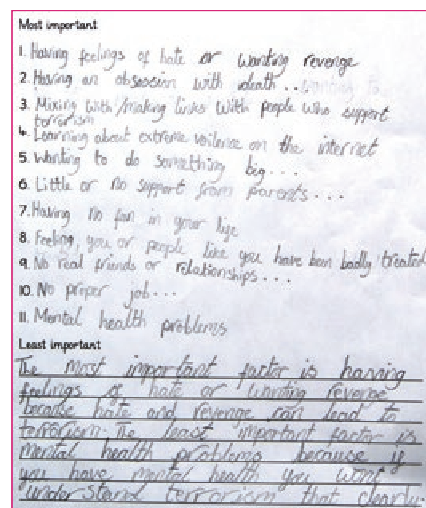
The P4C project considered the factors that contribute to an individual becoming a terrorist – looking specifically at the actions of Salman Abedi and Thomas Mair. Pupils used a flow diagram to look into the aspects that form a 'good life'. This enabled them to see what we need from the inside and outside to lead successful, positive lives. We then studied the profiles of Abedi and Mair to see if the factors in becoming a terrorist were present. As a class, we looked at these factors on a continuum to see which were most important in triggering radicalisation (Figure 3). Individually, the pupils thought about where they would place the factors in order of significance. This led to discussions around mental health and how it sometimes takes away an individual's ability to make rational choices.

Potentially, this was the turning point in the project. It enabled the pupils to understand that acts of terrorism were not solely random or impulsive. They had a clear understanding that choice is something we nearly all have control over, meaning the responsibility of your actions lies with you (Figure 4).

This Earth is one place – one shared place

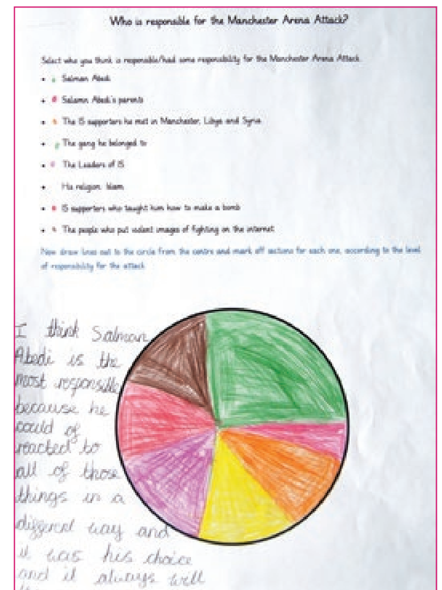
At the end of the unit of study, the pupils concluded that there is value in staying united as a community as a means of defeating hatred and terrorism. As they reflected on the project, the pupils felt as though their belief in their faith and moral values were stronger and that they were better equipped to use their critical skills to reason well when faced with difficult situations.

Terrorist attacks inherently provoke anger, fear and disbelief. The pupils feel that they now have a stronger understanding of why these individuals commit such attacks and can therefore see both sides. Because of this, the pupils feel they are able to refer to democratic and non-violent/peaceful means to resolve conflicts.


Most important
1. Having feelings of hate or wanting revenge
2. Having an obsessin with death...
3. Mixing with/making links with people who support terrorism
4. Learning about extreme voilence on the internet
5. Wanting to do something big...
6. Little or no support from parents...
7. Having no fun in your life
8. Feeling, you or people like you have been badly treated
9. No real friends or relationships...
10. No proper job...
11. Mental health problems
Least important

The most important factor is having feelings of hate or wanting revenge because hate and revenge can lead to terrorism. The least important factor is mental health problems because if you have mental health you wont understand terrorism that clearly.

Figure 3: Pupils' reasoning for the placing of factors contributing to terrorism on a continuum.


Who is responsible for the Manchester Arena Attack?

Select who you think is responsible/had some responsibility for the Manchester Arena Attack.

- Salman Abedi
- Salman Abedi's parents
- The IS supporters he met in Manchester, Libya and Syria
- The gang he belonged to
- The Leaders of IS
- His religion: Islam
- IS supporters who taught him how to make a bomb
- The people who put violent images of fighting on the internet

Now draw lines out to the circle from the centre and mark off sections for each one, according to the level of responsibility for the attack.

I think Salman Abedi is the most responsible because he could of reacted to all of those things in a different way and it was his choice and it always will

Figure 4: Pupils' reasoning for the assessment of responsibility in carrying out an act of terrorism.

References

Cobain, I., Parveen, N. and Taylor, M. (2016) *The slow-burning hatred that led Thomas Mair to murder Jo Cox*. Available at: https://www.theguardian.com/uk-news/2016/nov/23/thomas-mair-slow-burning-hatred-led-to-jo-cox-murder (accessed 28/7/2020).

Jo Cox Foundation (2019) *Our Vision, Mission and Values*. Available at: https://www.jocoxfoundation.org/vision (accessed 28/7/2020).

WEB RESOURCES

P4C project: *https://dialogueworks.co.uk/resilience-to-extremism*

Prevent strategy: *https://www.ltai.info/what-is-prevent/*

SAPERE training information and opportunities email: richardsgore9@gmail.com

SAPERE: *https://www.sapere.org.uk/*

Meghan Tipping was, at the time of writing, Year 6 Teacher leading in Philosophy for Children, History and Global Education at St Catherine's Catholic Primary School, Sheffield.

LISTENING TO PUPILS' OPINIONS: BUILDING UP AN ECO-CHAMPIONS CLUB

LEANNE CHOREKDJIAN-JOJAGHAIAN

Here, Leanne shares thoughts from members of her school's extra-curricular Eco-Champions club she has led for the past five years. The club shows concern for society by undertaking projects that build awareness of global issues on a local scale.

Starting an Eco-club

Kingsbury Green Primary School in London promotes hard work through pupil leadership roles across the school, which are encouraged by teaching and support staff. This provides a ready-made platform for me to deliver assemblies and endorse the aims and ambitions of our Eco-Champions club through posters and conversations with pupils.

Each year, pupils apply for roles across school by completing an application form for Eco Champions. Pupils are told what responsibilities are involved with the club and are asked to think about how their personal qualities would mean they are suitable for the role. They must commit one lunchtime a week for club meetings and a further lunchtime per week for a year to carry out their role. Pupils' contributions to the club are celebrated at the end of the year.

Capturing and sustaining interest

Eco-Champions is generally aimed at years 5 and 6, but pupils in years 3 and 4 have successfully applied too. Each year pupils must re-apply, which keeps the club fresh and accessible to all pupils who feel inspired by the work of the previous year's Eco-Champions. It also means that pupils are interested and engaged without feeling 'locked into' the club. Club projects are usually linked to the Sustainable Development Goals, but in 2019 we applied for our Eco-Schools Green Flag accreditation (see web panel), so we focused on the ten topics suggested by them.

Club projects

During our first meeting of the academic year, we discuss potential projects. Pupils take the lead on the project while I facilitate and steer their actions in the right direction. I also support them to risk-take, think creatively and evaluate their actions. Previous Eco-Champion projects include:

- composting uncooked food waste for use in the school garden
- reducing the use of single use plastic bags and plastic bottles
- campaigning and fundraising to swap conventional micro-plastic glitter for more expensive biodegradable glitter
- reducing electricity consumption and wastage by switching off lights and projectors when not in use
- encouraging others to use re-use plastic bags and straws to create products that have a longer 'usage life'
- working towards the Platinum Award for the Woodland Trust's Green Tree School Award and Eco-Schools Green Flag Award. (Currently, we hold a Platinum Award for the Green Tree Schools Award, and we have just achieved our Green Flag Award for Eco-Schools.)

Pupil feedback

I interviewed four pupils in the club (two in year 3 and two in year 6). Their responses to my questions convey just how much the club is valued in school.

Why did you want to be an Eco-Champion?

'It felt amazing to see other Eco-Champions and support the environment and I wanted to be part of that.'

'I was picking up litter and plastic in the playground which causes pollution and I didn't like that, so I want to work together with others to reduce that.'

'We were learning about climate change and it made me think about the gases we release each day, Sometimes I fly in an aeroplane and I see gases from factories and I don't feel that there should be that much so I want to do my bit to help.'

What are the aims of your current project?

'We learnt the three Rs: Reduce, Reuse and Recycle. We try to do these three things around school during our journey to be an Eco-School.'

'We are focusing on the topics Marine, Litter, Waste and Energy. That means we need to help others think about and reduce how many plastic bags, straws and bottles they throw away and if they can reuse them. We are collecting paper and telling everyone in school to make sure that paper waste is put in the blue bins and all other waste is in the black bins. This means we can recycle the paper. The litter pickers are picking up litter in the playground to keep our school environment clean.'

'We reduce the amount of energy that is wasted in school because a lot of pupils and teachers are leaving their lights and projectors on when they go outside or to assembly.'

How do you share your learning and achievements with the rest of the school?

'We make assemblies to show awareness of our work and we have been collecting information to see how well we are doing with our actions. We share all that is happening and what we have done to make changes in our school.'

'The Eco-Champions last year inspired me to be an Eco-Champion from their assemblies. I remember when my brother was an Eco-Champion [two years ago] and I saw him in one of the assemblies. I really wanted to be

Displays highlight the learning and achievements of the Eco-Champions. Photo © Leanne Chorekdjian-Jojaghaian.

one. It made me think about how I could help other people make changes in their classroom.'

'We have two displays which we helped Miss to design and put up. They tell pupils, teachers and visitors about our projects, so we have to make sure they are always neat and tidy.'

What have you achieved through your actions?

'We have achieved helping the environment in many different ways, we compost and that can help the plants in our school grow with natural soil. We have also reduced waste and that can help our environment.'

'We all know that plastic can kill the animals in the environment and we achieved spreading our message.'

'In January, we were using too much electricity but by April we saved £415.92 because we stopped wasting it. That's amazing!'

What have you learnt about yourself while being an Eco-Champion?

'I learnt to take responsibility for the environment. I have been harming so many creatures without even realising it, but now I know I've been trying to help the world and the environment.'

'I have learnt to make changes around my house to be more sustainable.'

'I can not only change the environment with my actions, but I can help express my feelings through my words by doing assemblies to support our local community and have a bigger impact on the world.'

What has been the hardest thing about being an Eco-Champion?

'Some of the children don't listen or understand. It's hard to explain when they are little and it means we need to keep telling them when we see them leave the light on or throw paper in the wrong bin or litter on the floor.'

'The hardest thing was to make my efforts last long because some people forget over time. It's about reminding yourself and the children of our actions all the time not just when you are in the club. You don't get a break from being an Eco-Champion, but I love it!'

What impact do you think you have had on the school community?

'Our school has been trying to stop using plastic and reduce litter and paper waste and that is because of us. Everyone is literally helping us. They're not perfect, but as long as they are trying that is good. Most of the community understand that the Earth is home to animals and insects and everyone, so we have to look after them. Even if you don't like insects, you can still help them because woolly mammoths and dinosaurs are extinct and other animals might get extinct in the future because of our actions.'

'We have helped change some people's mind-sets and our own about protecting the environment. People are making changes because of us. I used to use plastic bags and bottles, but now I tell my mum and my family to use fabric bags and refill their bottles. That is my impact.'

Why do you think it is important that we share responsibility for caring for our world and the environment?

'So we can all have a good life and we don't want to ruin our life by seeing our world in this condition. We don't want to hurt ourselves and the creatures.'

'A small action makes a big impact to the world. If everyone makes a small change then the world will get stronger and cleaner.'

The Eco-Champions have become the heart, soul and living embodiment of the ethos of the school. Even when things do not go to plan, these pupils are resilient and persevere until others are on board with their actions. The Eco-Champions are invested completely in supporting their teachers and peers to empathise with the environment and understand how their actions can impact others locally. Empowering pupils to confidently lead assemblies, contribute to newsletters and prepare displays supports them to recognise just how important their Eco actions are and that their voices really do matter to people, not only in our school community but globally as well.

WEB RESOURCES

Sustainable Development Goals: *https://sustainabledevelopment.un.org/?menu=1300*

Eco-Schools Green Flag accreditation: *https://www.eco-schools.org.uk/about/howitworks/the-awards/green-flag-award/*

Woodland Trust's Green Tree Schools Award: *https://www.woodlandtrust.org.uk/mediafile/100815876/green-trees-award-activity-guide.pdf*

Leanne Chorekdjian-Jojaghaian is the Lead Teacher in the Total Communication Base, a provision for hearing-impaired pupils at Kingsbury Green Primary School, London. As part of her wider role, Leanne leads on global learning and outdoor learning, and supports curriculum development across every year group.

INTRODUCING OMAN AS A GEOGRAPHICAL CASE STUDY

TAMSIN MURCHIE

Through the National Curriculum for geography, the DfE (2013) seeks to inspire curiosity and fascination in the world and to promote a better understanding of globally significant places. In this article, Tamsin shows how a study visit to Sharqiya Sands in Oman inspired her to do just that.

Discovering Oman – Phase 1

In 2018, a group of geography teachers gathered in the newly opened Outward Bound Desert Centre at Sharqiya Sands in Oman to begin a week of fieldwork. The aims of the team were:

- to promote Oman as a case study and to inspire student-teachers and experienced teachers to use it to deliver the objectives of the geography curriculum
- to develop lesson plans so that a comparison of the UK could be made with Oman to provide clear plans and supporting resources (including photos, diagrams, data, maps and first-hand accounts) that could be used by classroom teachers with or without a geography background.

All of the resulting plans and resources were to be made freely available online.

The big questions

The team agreed on ten 'Big questions' (see web panel), which would not only meet the aims set out above, but would also develop pupils' ability to enquire, reason and think. As the work progressed, the team realised they were developing resources that were strongly cross-curricular in nature.

With our Big questions in place, the team spent a week discovering Oman – it was a period of sensory overload and one that yielded more information and possibilities than we would ever be able to use in ten lessons. Figure 1 provides a brief introduction to Oman. The physician and author, Martin H Fischer, said: 'Knowledge is a process of piling up facts; wisdom lies in their simplification' (Fischer, 1944). This then was our task: we needed to turn all we had learnt from our fieldwork into a form that teachers could use to further their own understanding of the geography of, and develop a curiosity about, Oman.

Our fieldwork took us on an in-depth journey; we became immersed in discovering people, places and geographical processes at work. It started among the dunes where, with the help of four young geographers from the British School Muscat, data was collected on air and soil temperatures. It was here that we interviewed Saeed Jabir bin Hilays, an elderly Bedouin, who had spent his life in the desert. Saeed acted as a guide for the 1985 Royal Geographical Society's survey of the north-eastern region of Oman. This area was informally known as the 'Wahiba Sands' and today as the 'Eastern Desert' or 'Sharqiya Sands'. As there is a tradition of storytelling amongst the desert people, Saeed Jabir engaged us in the past, present and future life in the desert. Next, we travelled to the village of Al Mudayrib, located on the edge of the sands. We wandered through the village where the traditional *aflaj* system supplies water to irrigate the date plantations and provides villagers with water for washing, cooking and for their animals. The team moved from farming to fishing and interviewed a fisherman to learn about his home in Tiwi and about the government's interventions to ensure sustainable fishing in the Sea of Oman.

Leaving rural Oman behind, we headed to Oman's capital – Muscat – where modern living meets the traditions of the past. Oman Tourism Development Company's (OMRAN) vision for the future was shared during our visit to the site of a new city on the edge of Muscat and to the city's new conference centre. When visiting the redeveloped port area of Muttrah, we were able to compare past, present and future Oman, seeing this old trading centre with its famous *souq* (a kind of market) and the merchant houses for ourselves. While in Muscat, we met with geologists to learn about Oman's treasures and the importance of oil and gas to the economy; and also with researchers and scientists at the Middle East Desalination Resource Centre (MEDRC), who explained how the country is approaching the issues of water scarcity and how precious groundwater is protected. Leaving *terra firma* behind, we took to the sea to explore coastal erosion, coastal features and to learn about Omani coastal defences (see web panel).

Turning fieldwork into plans and resources

The week included time for the team to gather, reflect and discuss how to turn our knowledge and understanding into a form that would be both easily accessible and one that schools could use. Having the 'Big questions' helped to keep the focus needed for the project to be a success. The team of creative geographers, all of whom taught different age groups and different curricula (including the English National Curriculum for KS2 and KS3, the IB Primary and Middle Years Programmes and the Scottish National Curriculum), agreed that the way forward was to use a common format and structure for each of the lessons.

The team then had to agree on who was doing what. Again, having 10 'Big questions' was key to moving forward: we agreed to work in pairs with one teacher having responsibility for the final plan and resources and with us all having overall responsibility for at least one lesson plan and any supporting resources. Additionally, pairs comprised one UK-based teacher working with one from Oman. This was invaluable when it came to developing comparisons between the two countries. It also helped with proof reading and editing of the plans and resources. Working in this way allowed for the creativity of each member of the team to be utilised to the full. As a result, the plans promote thinking skills and provide opportunities for cross-curricular links. Ultimately, it was down to one team member to check the consistency of planning and resources and to ensure deadlines were kept. Support came in the form of the Young Geographers at the British School Muscat who provided invaluable feedback on the project and suggested improvements. The final stage of the project saw all 10 plans and resources edited and 'branded' by geographer Chloe Searl, before being launched and uploaded to their current home on the Outward Bound Oman website.

All ten lessons were first trialled and are now being used successfully in schools in Oman and the UK. Although the lessons were written with key stage 2 and 3 pupils in mind, even the youngest pupils at the British School Muscat have made use of the images. These have helped develop

Oman has:

- a spectacular 3000km-long coastline
- desert sands including the Rub Al Khali (the world's highest sand dune located within the largest sand desert on Earth)
- mountains soaring to heights over 3000m
- cave systems that including some of the world's deepest caverns
- unspoilt beaches, islands and *wadis* (dry valleys)
- modern day cities alongside ancient settlements and traditional villages
- treasures of oil, gas, copper
- seas that support a vibrant fishing industry, and
- innovative methods of agriculture to help sustain a growing population.

Oman is one of the world's wonders and a significant player on the global stage. It is a geographer's dream in terms of learning about place: the country is rich in terms of human and physical characteristics and one in which the context is provided for geographical processes to be explored.

Figure 1: Oman – background subject knowledge.

the pupils' knowledge and understanding of Oman with pupils in EYFS using photos taken in supermarkets in Oman and UK to learn about what is sold in the two countries (see web panel)

Conclusion

There are so many wonderful places to learn about, explore and use in the development of global knowledge and awareness; and Oman is one such place. The country has historic ties with the UK going back to the Age of Exploration. In 1800, the bond was formalised in a treaty in which it was declared that the countries friendship should be 'unshook till the end of time and till the sun and moon have finished their revolving career' (Alston and Laing, 2012). With pupils in Oman and the UK discovering Oman through the primary geography curriculum supported by these online resources, we are helping to sustain this unique agreement and foster an understanding of a truly amazing country. Enjoy discovering Oman.

References

Alston, R. and Laing, S. (2012) *Unshook till the end of time*. London: Gilgamesh.

DfE (2013) *National curriculum for geography*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239044/PRIMARY_national_curriculum_-_Geography.pdf (accessed 28/7/2020).

Fischer, M.H. cited in Fabing, H. and Marr, R. (1944) *Fischerisms*. Springfield, IL: C.C. Thomas.

WEB RESOURCES

Download resources to accompany this article: *https://www.geography.org.uk/Journals/Primary-Geography*

Oman resources: *http://outwardboundoman.com/discovering-oman/*

Tamsin Murchie is a Year 5 teacher and Humanities Subject Leader at the British School Muscat, Oman.

DEMOCRACY IN THE CLASSROOM

LILY SMITH

In this article, Lily reports on her experience of taking part in a course that explored the relationship between democracy and diversity in the classroom, and the impact it has had on her teaching

In April 2019, I joined other students, teachers and professors from Austria, Estonia, Finland, Germany, Hungary, Spain and Sweden, in Budapest, Hungary, for ReCreaDe (Reimaging Creative Democracy – see web panel for more detail). This annual ten-day intensive course brings together people with diverse interests, experiences and career plans in education to explore the relationship between democracy and diversity in the classroom.

What is democracy?

The term 'democracy' is a broad and challenging concept, through which it seems we are bombarded with the ideas of elections, politics and voting. Before this experience, I (like many others) understood the institutional nature of democracy, but not its wider nature. Thanks to the ReCreaDe course, I now have a greater understanding of the importance of democracy, especially in learning environments, such as the classroom.

The course was centred upon John Dewey's essay, 'Creative Democracy – The Task Before Us', in which he describes how democracy: 'as a way of life is controlled by personal faith in personal day-by-day working together with others. Democracy is the belief that even when needs and ends or consequences are different for each individual, the habit of amicable co-operation... is itself a priceless addition to life' (Dewey, 1988, p. 228).

Hart (1992) emphasises how democratic participation cannot be switched on and off easily, but is a continuing process that can be developed and adapted over time.

What does a democratic participation look like?

I have come to understand both the value of democratic participation and the importance of encouraging even the youngest pupils to act democratically. The involvement of pupils in shared decision making on a regular basis allows them to become respectful and responsible citizens. Democratic participation needs an open and safe space with different learning environments that encompass all learners' needs; and includes pupil- and peer-led learning, both of which emphasise freedom of expression and teamwork.

During the course, participants discussed a variety of examples of this approach, including allowing pupils to choose the topic they were taught or allowing the class to choose the type of classwork – i.e. whether it was worksheet- or project-based and whether it involved working in groups or working independently. Involving pupils in the learning process and giving them a say in their own learning environment can encourage critical thinking. In relation to this, Dewey believes in ideals of truths that enable the 'facilitation of care, empathy and open-mindedness, which are essential for reflective thinking and democracy' (quoted in Bleazby, 2011, p. 464).

Furthermore, Hart (1992, p. 37) states how 'schools, as an integral part of the community, should be an obvious venue for fostering young people's understanding and experience of democratic participation'. Figure 1 offers an extract suggesting some examples of different levels of democratic participation, based on Hart's levels (1992). See web panel to download the complete table. A democratic practice that all participants had seen in schools involves pupils as a governing body, whether it is as a school council or a group of pupils that decide issues of educational planning. However, the extent of how democratically effective different school councils are, was also discussed during the course. Here, Hart (1992, p. 32) mentions how the 'ability to truly participate depends on a basic competence in taking the perspective of other persons', and if democratic participation has not been introduced to the pupils before, this can sometimes be difficult to achieve.

Participants came to an agreement that the effective school councils that we had seen all had a mutual understanding, between the teachers and the pupils involved, to respect opinions and take on board ideas that they may not have considered. In the school council I had observed, all of the pupils respected that some of their peers, including teachers, were going to have opinions that they may not agree with; however, they knew that by being able to take on the perspective of their peers, they could work together to implement their school council's policies.

While all the course participants were able to cite at least one democratic practice that they had seen in their schools, everyone agreed that democracy could definitely be improved within the daily classroom environment. Inclusiveness plays such a vital role in a democratic classroom, yet it cannot be achieved without diversity and equality. Democracy is important to reciprocate in the classroom, giving pupils agency and ownership within their learning and further increasing their responsibility.

A democratic school in action

One of the highlights of the ReCreaDe course was a school visit. Along with other participants, I visited a very democratic school – one that embraced a holistic approach to learning. I really enjoyed hearing how passionate the head teacher was towards having a democratic school and how he respected and saw the voices of his pupils as just as important as his colleagues' voices. This was emphasised when we (the visitors) were told the name of the school was chosen by the pupils and translates to 'Student Student', reinforcing the idea of the school being democratically organised in a way that it revolves around the students/pupils' ideas.

The head teacher expressed how the school had not always been as democratic as it is now – doing so was a gradual, progressive process – but he emphasised how little acts of democracy can help progress towards a democratic school. Every lesson taught in the school featured an aspect of project-based learning, which would link to learning life skills. For example, year 5's project was 'How to own a farm' and year 6's 'How to live in a different country'. At the end of the year, the school holds several exhibition days where the pupils presented the finished projects from their project-based learning to family and friends. This motivates the pupils, because they are able to present what they have been working towards all year. The school also placed each child into groups called 'families', allowing pupils from different backgrounds and age groups to learn from each other.

Using these ideas in my own practice

In my current school placement, I now consider different ways for pupils to democratically participate, and have identified several strategies to infuse democracy into everyday scenarios.

		Examples could include:
Different levels of non-participation	**1. Manipulation:** Children have no understanding of the underlying issue and don't understand how their actions contribute.	• Children carrying political placards without discussing their meaning • Children are asked to design a playground. Adults synthesize their ideas in private and children have no idea how their ideas were used.
	2. Decoration: Children are part of an event in an indirect way. They have no say over the organisation or democratic content	• Children wear T-shirts relating to a cause. • Children perform a song or dance at an event
	3. Tokenism: Children are given a 'voice', but have no choice about the subject or method of communication, with little or no chance to formulate their own opinions.	• A school council where pupils are selected by adults to meet, and the adult chooses the subject matter and method of voting.
Different levels of democratic participation	**4. Assigned but informed:** Children understand the intentions of the project and know who made the decisions concerning their involvement. Children have a meaningful role and volunteer for the project after the project was made clear to them.	• A conference e.g. World Summit for Children where roles are created which are important both functionally and symbolically. • Children play the important role of ushering the Presidents and Prime Ministers to the right places at the right times. • Token events with a lot of photographs taken.
	5. Consulted and informed: Project is designed and run by adults, but children understand the process and their opinions are treated seriously.	• Ideas are designed in consultation of children, e.g. new ideas for television programmes. • Low cost versions of the programme are created and critiqued by the children. The programmes are then redesigned and again shown to the same expert panel of children.

Figure 1: Exemplifying different levels of democratic participation. See web panel for further examples. After Hart, 1992.

There are roles within the classroom that are distributed and shared equally, so all pupils are democratically included. As Said *et al*. (2015, p. 22) believe, 'including children in planning and decision making can promote a higher level of learning experience to them', a notion that I have applied in my classroom. The pupils decided the context of the curriculum and what tasks to focus on. Last term, they chose 'Harry Potter' as the theme to base their lessons around. This enhanced their learning experience: the pupils thoroughly enjoyed the learning process because it was taught in a way that they had democratically chosen. The pupils could arguably apply their learning to a topic that they really enjoyed – an idea that Pearce (2016, p. 1) supports, stating how 'experiences that do not encourage children to make meaning from their learning will quickly be forgotten'.

Class tasks frequently involve teamwork and peer-led learning, where the pupils work together to learn from each other. If a disagreement arose in the classroom, circle time was introduced – the pupils sat down with the teacher to discuss their ideas and planned how to resolve the matter. Freedom of expression is evident within the school, and its importance was emphasised during the intensive ReCreaDe course in Budapest. This highlights the importance of an open and safe learning environment, where pupils feel comfortable yet motivated to learn. During the course, participants also considered how different classroom layouts can contribute to levels of democratic participation by addressing the question: do children have equal access to resources, to discussion or space to think by themselves, if necessary?

In my school formative assessment is heavily emphasised in comparison to summative assessment and pupils are encouraged to be interactive through peer-assessment. Teacher assessment focuses on the process rather than the assessment of knowledge: the teachers personalise the process by considering pupils' prior attainment and their immediate steps, rather than using external criteria.

Considering the impact of my trip

It is difficult to do justice to all the different experiences and perspectives participants shared during the course in Budapest. The experience was exhilarating – sharing my ideas with other educators has influenced my ideas about teaching and made me more independent. The intensive course helped me reflect on how, as a teacher in training, I can facilitate 'a freer and more humane experience in which all share and to which all contribute' (Dewey, 1988, p. 230). I now have a broader outlook on school classroom structures and consider what factors can make it easier for pupils to participate more fully in the classroom. Democracy is viewed by Dewey (1939, p. 2) as, 'a personal, an individual way of life' and although it is very much a personal journey, it cannot be achieved without working with diverse people, in unity.

References

Bleazby, J. (2011) 'Overcoming relativism and absolutism: Dewey's ideals of truth and meaning in philosophy for children', *Educational Philosophy and Theory*, 43, 4, pp. 453–66.

Dewey, J. (1988) 'Creative democracy – the task before us' in Boydston, J.A. (ed) *The Later Works of John Dewey 1925–1953, Vol. 14: 1939¬1941 Essays, Reviews and Miscellany* (1st edition). Carbondale, IL: Southern Illinois University Press, pp. 224–31.

Hart, R.A. (1992) *Children's Participation: From tokenism to citizenship. Innocenti Essays No. 4*. Florence, Italy: UNICEF.

Pearce, S. (2016) 'Authentic learning: what, why and how?', *e-Teaching Management Strategies for the Classroom*, 10, pp. 1–3.

Said, I., Sahimia, N.N., Zabariah, P. and Rahman, M.A. (2015) 'Revealing young children and teacher's behaviour through active participation in deciding classroom layout', *Procedia – Social and Behavioral Sciences*, 168, pp. 22–9.

WEB RESOURCES

Download a fuller version of Figure 1: *https://www.geography.org.uk/Journals/Primary-Geography*

ReCreaDe: *https://www.recreade-erasmus.eu/*

Lily Smith is a student at the University of Chester, completing her Primary Education BA with QTS degree.

PRIMARY GEOGRAPHY IN PRACTICE

This page offers further ideas for using the contents of this issue of *Primary Geography* in practice in your classroom. Share your ideas inspired by this journal on Twitter @The_GA #PriGeogJournal

Article	In practice
Geography *really* matters!	• Consider the 'diet' of geography in your class. Does it reflect the dynamic subject that Gill describes? • Complete the postcard activity and consider how you could alter what or how you teach to reflect pupil suggestions.
Using 'Critical Thinking for Achievement' to challenge pupils' thinking	• Using the Sense of Place activity, ask pupils to take photos of their local area. Ask pupils to think about their 'ideal' local area. What's the difference? What could we do to bring our local area closer to that ideal? • Using photographs as a stimulus to a new topic, use the question generator to interrogate the images further. Consider how we can use images to challenge pupil's thinking or to think more deeply about a new subject.
Space and place in a time of lockdown	• Create a trail of the school grounds to help pupils to evaluate how they use the space. • A school council activity could prompt pupils to examine underused areas of the school grounds and suggest how they could be improved.
Paying attention to a more-than-human world	• Think about your next field trip: how could you leave space during the schedule for pupils to develop their own connection? This could be time to explore, to find a specific object or simply a moment to be still, listen and reflect. • Use 'Thingly Invitations' as a frame to support pupils in engaging their senses. Pupils could be challenged to use the same frame to empathise with something or someone else.
Go with the flow: Using non-native species to show the interactions between human and physical geography	• When teaching a new concept, do pupils' interests sometimes take an unexpected turn? How could this be incorporated into future planning? • Consider how using the shared background knowledge developed in a unit of study could be applied to a contemporary issue.
Rewilding our school spaces	• After sharing this article, pupils could write a letter to the head teacher asking for a rewilded area of the school grounds. • Pupils could investigate the biodiversity of their rewilded area and record how that changes over time.
Bug burgers? The climate emergency and eating insects	• This article could be used as a starting point to discuss our impact on the climate emergency. Conduct a tasting of products containing insects. How did pupils feel before and after? • Pupils could also consider what other actions they could take to lessen their impact on the climate emergency.
Views on the state of primary geography	• Discuss the bullet list from this article with colleagues. Which statements resonate most with your school's geography curriculum? Which could you adopt to improve geography in your school for the future?
Fundamental British Values: Geography's contribution to understanding difference	• Consider a discussion with your pupils. What are your 'values'? What are the school's values? What are British values? Are these all the same? What happens when they differ? With older pupils, you might want to discuss how British values could be used to include or exclude people. How do pupils feel about this?
'We have far more in common than that which divides us'	• Philosophy for Children (P4C) is an excellent pedagogy that places open-ended and philosophical enquiry at the centre of a school's curriculum. You may want to find out more information at *https://www.sapere.org.uk/*
Listening to pupils' opinions: building up an Eco-Champions club	• If you have an established eco-club, consider how you could use your pupil's opinions to inform your next project. • If you want to start one up, have a narrow focus to start and achieve, in order to build pupils' confidence and build momentum.
Introducing Oman as a geographical case study	• The planning and resources at *http://outwardboundoman.com/discovering-oman/* could be used to create a new geographical case study.
Democracy in the classroom	• Using Figure 1 from this article, consider how you increase pupils' democratic participation in school.

Day Trips and Outreach

Inspire and engage your pupils with an outdoor learning experience this term. Our centres and outreach trips are fully Covid secure.

- Bring learning to life on a **primary day trip**. Make the most being out of the classroom with as much time spent outside as possible.
- Our **outreach packages** offer expert staff and a hands-on, outdoor learning day in your school grounds or local area.

“Great facilities, loved the sustainability credentials. Beautiful location especially good for inner city children”

For more information please call Jess on **01743 852135** or email her at **jess@field-studies-council.org**

FSC

Give them an experience to remember

TEACH BETTER GEOGRAPHY WITH THE PRIMARY GEOGRAPHY QUALITY MARK

An evidence based subject development process

The PGQM :

- is a tool that helps you to make improvements where they are needed most
- raises the profile of geography across the whole school
- helps to showcase your skills and knowledge and what you do well
- helps to evidence whole-school progress for Ofsted or Estyn
- is moderated by experts and accredited by the GA.

Register now and start the process here:
https://www.geography.org.uk/pgqm

Continue your CPD journey with the GA Professional Passport

The GA Professional Passport is an online portfolio that allows teachers to reflect deeply and critically on the professional development they engage with, and to identify the impact that it has on teaching and learning geography.

www.geography.org.uk/The-GA-Professional-Passport