Episode seven: Natural language

You can find the show notes and link to the podcast at https://www.teachingenglish.org.uk/professional-development/podcast.

Duration: 48:36

Quote: Language teachers are the luckiest teachers because any topic is our topic.

Quote: The children in Beijing saw the image of clouds, and they associated that with smog.

Quote: We’re definitely getting warmer, we hear from the elders that the land is changing.

Quote: Educators and schools are heading in the same direction that we are, you know, they want the students to think globally, they want the students to be responsible citizens who care about the planet so I think in that sense, we’re all heading in the same direction.

Sting: The British Council presents The Climate Connection. Climate action in language education. This is Episode Nine: Environmental Writes.

Chris Sowton: Hello and welcome to The Climate Connection, a British Council podcast focusing on climate action in language education. I’m your host, Chris Sowton. This is Episode Nine: Environmental Writes in which we explore how the global climate crisis is represented in English language textbooks.

Our first guest this week is George Jacobs. George Jacobs is an educator and vegan activist based in Singapore, who has written extensively about how to include environmental education in English language materials. George, thank you very much.

George Jacobs: My pleasure.

Chris Sowton: So if I could just begin with a general question about the ELT publishing industry. What responsibility do you think it has and their textbooks for environmental education?

George Jacobs: So I think that more and more people see that it’s, it’s got to be there because we’ve got to do something. So I think yeah, there is a responsibility and I think that more and more teachers, families, students, they want to see this.

Chris Sowton: Do you think publishers themselves, is it in their own interest to do this as well?

George Jacobs: Yeah, because I think people want relevant stuff, and all this about the UN Sustainable Development Goals, that’s so relevant and Covid only reinforced that.

Chris Sowton: And do you think the publishing industry has always had this responsibility? Have you, do you think historically they have seen environmental issues as being an important part of English language teaching or have they, sort of, missed the issue a little bit?
George Jacobs: Yeah, I think that there's a tendency to think of, we got to give the students what they want and they want to have happy. They want to have candy, they want to have travelling, they want to have clubbing, depending on their age group. So, it's, it's a downer to talk about pollution and poverty and all the problems that the world is facing. So, yeah, it's definitely tempting to look away.

Chris Sowton: How do you think you engage young people in environmental issues in a language teaching context? You talk of, that is, you say it's often portrayed in a negative way, you know, pollution and all these sorts of things. How can you present it positively, do you think?

George Jacobs: Well, one way to do it is to show some optimism, to show what people are doing to make it trendy, to be an activist for climate or for gay rights for so many different things we do that, it's exciting.

Chris Sowton: You use an interesting word there: activist. And I think a lot of teachers, certainly a lot of progressive teachers, would want to see language teachers as being progressive in that way, but a lot of the parents a lot of institutions may have a very different view to that, how do you get that right balance, would you say?

George Jacobs: Well, one thing I remember from way back when I was studying to be a teacher. There was someone named Wilga Rivers, who wrote that language teachers are the luckiest teachers, because any topic is our topic, you know they're getting the comprehensible input, they're producing the comprehensible output, so we could be talking about global warming, or we could be talking about the latest clothing styles, and we're still getting those things that, whose language acquisition.

Chris Sowton: And what do you think is the key to turn young people into activists, so how do we make that link between the classroom and language learning, and actually turning people into activists who can take control of their lives, who can help to implement the UN Sustainable Development Goals for example?

George Jacobs: Well, back in the 70s, the United Nations Environment Programme came up with six things that we need to do. First is awareness, so we have to make people aware of the situation. Second is understanding, so they have to understand what is it that causes global warming. What's the mechanism? Then they have to care, they have to care that what's happening on the other side of the world or even on the other side of their city is important. Next they need the skills and language skills are important, but also scientific skills, communication skills are important. Then, evaluation, they have to be able to decide, because we hear so many different ideas for helping the environment so we have to help students develop the ability to choose. Then last and definitely not least is the participation. So they've got to do something.

Chris Sowton: And how would you see that balance between the global and the local in that way? Lots of textbooks which are published are by big global publishers including Oxford University Press, etc, etc, etc. How do you see that balance because what's relevant in Singapore where you're based is different from the Democratic Republic of Congo, or Canada or France or wherever it may be, so where do you see that balance?

George Jacobs: Well I think the answer there is that we need teaching professionals, we
don't want teacher proof materials, so that's not possible, it's not good. We don't want to say okay we're going to make a textbook you the teacher, you have to do exactly what's in the textbook, no, we want to empower the teachers in consultation with the students to come up with ways to have the project-based work that's relevant to their situation that's relevant to their issue so empowering the teacher, I think, is the answer there.

**Chris Sowton:** From your own experience of writing textbooks and writing materials, how do you go about incorporating environmental components within that, whilst making sure it's still very much a language focused course, what are some of the things that you can do or what kind of, have you done in your own experience and what tips could you give to other writers doing something similar?

**George Jacobs:** One of my most successful projects, I don't know about in terms of sales but in terms of my happiness and value in a project, we called it Triple E: English through Environmental Education. And we did this, a project working with university lecturers in Indonesia. So we got together, we went to this eco resort, eco education place and we brainstormed, we talked about certain principles for what makes good materials, what makes good environmental education materials, then each person came up with ideas from their own setting. There's something called a pemulung man who goes around collecting scraps, old materials and things like that, or we did something on dynamite fishing, where they draw the dynamite in, all the fish die, they come to the top, and they collect them. So we had very much based in their context. And then we created this book, which was for non-English majors at Indonesian universities. Again, we tried to stick with those six ideas in the UN Environmental Programme, we tried to talk about student-centred learning. And so every lesson had a language point, a language focus, and every lesson had an environment focus.

**Chris Sowton:** And that seems to be a really successful model that you've got that, that overarching framework from the UN, which is obviously informed by good practice, you've got that local context so it's realisable and familiar to the learners, but then it's also interesting stories

**George Jacobs:** And like you say Chris, it's very local-focussed.

**Chris Sowton:** And if I could just turn a little bit to talk about sort of language as a wider issue you touch on it a little bit in what you've said so far, but in a recent article you wrote on ecolinguistics and education you say that: 'language plays a key role in all this green activism, just as it plays a key role in the status quo, which has led to the current deteriorating state of the planets'. Can you just expand a little bit on, on what you mean by that?

**George Jacobs:** Okay, well, it's just like with language and sexism, you know, there's something called generic ‘he’: a doctor should take care of his patients, assuming that all doctors must be males. And I've done a lot of studies that have looked at language textbooks so we what we do is we just take about 17, 20 language textbooks and we analyse them for different things like, what about the presence of animals, what about the presence of participation in solving environmental problems, what about food, what about cooperative learning? So, what about historically: is it different than it used to be? What about techno-optimism or neoliberalism? Excellent question.

**Chris Sowton:** But I suppose I still come back to this issue that you know, critical
pedagogy, critical reading, you know, challenging some of the language that students might find in their own textbooks produced by their own ministries of education and all those sorts of things. This is quite a dangerous territory for a teacher to put themselves in, or students to put themselves in, in certain contexts, and I still wonder how we can do that, if we are talking about a paradigm shift in terms of our attitudes towards native speakerism and all these sorts of things. How can we make that happen or how can an average teacher do that in their own context?

George Jacobs: Yeah, it's tricky. You know, Singapore is not really famous for free speech, although certainly it's a lot better than many places. In Singapore they talk about out of bounds markers. In other words, what's going to get you in trouble. So, yeah, and every school has got out of bounds markers. So, yeah, we have to read, we have to read that, we have to have colleagues who can help us read where what's going to fly, what's not going to fly, how to change things so they can't fly. And yeah, so we just do what we can do. That's my view, but like you asked me am I a techno-optimist? I am. I think technology is what's going to be the big factor in changing the world. Now it's not changing at 100 per cent for the better, but changing it 80 per cent for the better and let me give you an example. I mean, I've been a vegetarian for 40 years, I don't care about it, but so many people do. I've harangued my family members, etc, to absolutely no avail. For so many years I've set a good example for them, to no avail. I'm hoping that technology is going to come in and save the day.

Chris Sowton: And what role do you see the English language having in, in that techno-optimism?

George Jacobs: There's a supply side, all the inventions, but once we have the inventions, we have to work on the demand side too. And I think that language can help people understand why it's better to buy this, this cell-based meat. Even though, at least now it's more expensive. It's better to do it, and helping people understand the issues what I'm hoping is that once we have an alternative, then we can see. it's like, there was nobody who would defend slavery now, but 200 years ago, lots of people, including the founding fathers of the United States, many of them were slave owners, but now we, now we're not using slaves for whatever reason, or not so much. I know there's still slavery, but now it's so easy to be enlightened about slavery. We don't need the slaves, we don't need to have slaves. So, I think once our need for meat, once our need for fossil fuels, etc. Then we'll be better ready to understand why it's not the best thing.

Chris Sowton: Do you see the English as a, as a lingua franca can play an important role in achieving positive environmental successes?

George Jacobs: Certainly collaboration is so important. And we need a common language to communicate in. And right now, that's English like, of course I know that there's so many varieties of English, and we don't have to say only two varieties are the good ones. If you don't communicate in one of those two varieties your, you know, you must be stupid or something like that. So, yeah, but I think language is so important and a lot of people are saying with Covid one of the positive things to come out of it is how scientists from all over the world have collaborated. I know the collaboration isn't perfect, sharing the vaccine, etc, not so good but developing the vaccines, lots and lots of collaboration, and I'm not involved in that, but I'm guessing most of it is in English. A great quote from Martin Luther King Jr, the Nobel Peace Prize Laureate, and he said: 'it really comes down to this, that all life is interrelated. We are all caught up in an inescapable network of mutuality, tied into a single
garment of destiny' So by working for justice for everyone, regardless of what language or what variety of language they speak, regardless of where they live, regardless of what species they are, then it's going to make the world a happier, more co-operative place, and hopefully we'll be able to tackle a lot of the problems that are highlighted in the UN Sustainable Development Goals.

**Chris Sowton:** Okay, thank you very much, George. That's fantastic.

**George Jacobs:** Thank you, Chris.

**Chris Sowton:** Many thanks to George for sharing his thoughts. For a full transcript of this interview, and additional material, please visit [www.britishcouncil.org/climate-connection](http://www.britishcouncil.org/climate-connection).

**Vox Pop:** I'm an English teacher in New Manor House School in Egypt. Regarding the environment and our planet I try to raise awareness for saving the environment and our planet through having some activities related to our curriculum, and to the environment. Our curriculum is from the National Geographic Close-Up students’ book A2 Level. So we have some units that talk about the world around us, the place to be. So I try to relate this unit to our environment and planet, I try to tell them, to talk about them, how to save our environment, how to use the waste and recycle it to into a useful things in our life that we can use it again one more time.

So I asked them to make some handcrafts. For our waste to become like a pencil case I give them some examples. I guided them through some video links that I told them to watch it, to have some clues and ideas, how we can make a recycling. So they surprised me with the projects and handcrafts. I displayed all the handcrafts in their classes. And then, I gave them at the end, a certificate for their participation and for the excellent work, and to show appreciation for what they had done. They were really talented students. Thank you.

**Chris Sowton:** At the time of recording, Canada has just experienced its highest ever recorded temperature of 49.6° Celsius (121° Fahrenheit). With around 150,000 square kilometres of land ice, Canada is particularly vulnerable to global warming and rising sea levels. In today’s From the Field, we visit the country’s Northwest Territories, to learn about a project which has led to the creation of a whole new vocabulary of renewable energy terminology.

**From the Field**

I'm based in Inuvik which is in the northern part the Beaufort Delta it’s the traditional land of the Inuvialuit and the Gwich’in it’s a very beautiful community, it’s a small community in the Arctic Circle, close to the Arctic Ocean, lots of nice spruce trees, lots of willows, lots of water, we're in the delta, you very much do you feel like you live on the land when you live up here, it's very remote.

We will have snow on the ground till the end of May, and it snows sometimes in August. By September, it'll be snowing again, we get the Northern Lights, we do get the two cultures indigenous cultures of the Gwich’in and the Inuvialuit, and they share this land with us.

Yeah, well I was looking for a thesis project for my Masters. I was doing a Master’s in Environmental Education and Communication and at work we just sort of put this proposal forward, a colleague of mine to do this project with the Inuvialuit to help them support their
language through reconciliation, develop words that we could be using to communicate with them about renewable energy, energy conservation and energy efficiency. Our energy is also very high in greenhouse gas production as it’s produced. In this region, particularly, we have what we call thermal generators in our communities to produce our electricity. So, primarily, these are base, which is very inefficient, there’s a lot of waste from that. We are working towards trying to capture that and adopt renewable energy, that’s primarily our role at Arctic Energy Alliance to work with the communities in this region and the whole Northwest Territories to adopt their renewable energy, use it better and to use it more efficiently in order to reduce those greenhouse gases, and also to make it more affordable and offer energy security to the residents up here.

You know, everybody cares very much about the land and the climate up here but we are faced with the longest and darkest days of winter, possibly in the world, and you do need to have a level of heat, light and energy in order to survive. And so there is a cost to that, an environmental cost. We’re definitely getting warmer, we hear from the elders that the land is changing, that food security issues are arising because of that, maybe the traditional foods aren’t always as easily available, or they’re available at different times when the land may not be as accessible as it was.

Our main focus was to work with the elders who speak the traditional Inuvialuit language of this region, to capture their historical use of energy through stories and to use that to develop terms, modern terms that we could use to communicate and promote renewable energy conservation and efficiency in the region, using the traditional language of the elders. We worked with the Inuvialuit and their language centre here, they are also trying to revitalise and keep their language going, it is of course almost extinct. So there is some work to be done with the elders, while we still have their wonderful knowledge to capture it. Together as a group, they came up with the words that we were looking for, we did some work around energy literacy, showed them ways to conserve, use energy better, renewable energy technologies, and together as a group they came up with words or sayings, and we came up with about ten so that they could use those words, talk about those words and talk about the message we were trying to deliver to help support energy security, and reduce greenhouse gases. It was just such an educational experience I think for everybody involved to learn about energy literacy, and also traditional ways, and perhaps also we got a glimpse of where they would like to see things going. So that was, that was really valuable.

For example, we would put up solar panels and they would go into groups, and they would come up with the word in their dialect, then they would all agree, which was the strongest and represented it the most. So, it may not have just been the word, it might have been a saying that said flat pieces of glass that capture the sun to create energy, so they would take their traditional words and come up with that phrase, and then they would come out with a two word term that would say solar panels, and then we would take that word that they created, as well as the explanation, the definition. And then we had an artist create a picture in a traditional sense, like we had the solar panels put on a tent, a traditional tent up here, and that would be what we would produce in a way that could be distributed around the community, whether that be a poster, or a magnet, or a bag, or coffee mug, whatnot, and that would be where the conversation would start in their home with their families.

And there are differences. But what we found when we did this project was a lot of the words were really anchored in the land. So for example, the sun came up quite a lot, water came up quite a lot, and those words all had happened, fortunately for this project to be
very similar, where we did need to modernise was when the language hasn't, didn't keep up to the newer technologies such as batteries or the solar panels or a wind turbine.

The Inuvialuit this year, they did a really excellent project, they built community freezers, in each of their communities. And we worked with them to provide funding to put solar panels on those so during the winter they will be unplugged but in the summer they will be running off of renewable energy. So, I do believe these, this language project helps support and start that conversation and it's working. The Inuvialuit have recently done a similar project but rather than words and energy literacy around renewable energy conservation and efficiency, they took it sort of to the larger level around climate change. So they've done a similar project I think two years ago with the elders and youth as well, and came up with 21 terms around climate change and they're just putting together now, a children's book, locally written and illustrated produced with funding through the, I believe, it's our federal government to support Indigenous language revitalisation. And we'll expect to see this book available within the next year in the Inuvialuit region to help educate around climate change. I think it's always very important in projects, like with language revitalisation and modernisation, to remember that traditional languages, culture, to encourage the use of it. When producing new words, search the traditional history of energy, listen to the elders, consult with the elders, document and support, wherever it's needed, do that through a lens of decolonisation, and to the benefit of the language holders and know that the language will belong to them after. It's not yours to keep. We handed all those words over to the Inuvialuit, and the elders and said: these are yours, do what you like with them, we'll use them for this one purpose, but then they do belong to you.

I do feel the Solastalgia, I'm almost 50 years old and I feel this anxiety and loss, to what was and even what was before my lifetime. And I worry that that may never be back to the same for the Inuvialuit, the Gwich’in, or even my grandchildren.

Chris Sowton: As we near the end of our series, we decided that we would invite some of our contributors to the Green Glossary to share with us a climate related word or phrase which they think has a particularly interesting history. This week, we hear from Tania Styles discussing ‘monkeywrench’, and Kate Wild talking about ‘degrowth’.

Sting The Green Miscellany. The Green Miscellany. Brought to you by Oxford University Press

The Green Glossary:

Kate Wild: A word I find really interesting is degrowth – this isn’t in our dictionaries yet, but we’re currently working on it. People writing in the field of ecolinguistics have often pointed out that there is a problem in English and other languages in the way that growth, specifically economic growth, is conceptualised as positive and necessary. Back in 1990, the linguist M.A.K. Halliday wrote about the way we’re constantly presented with the message that ‘growth is good’, while antonyms like ‘shrinking’ have all sorts of negative connotations. And he noted that largeness of size is presented as normal or neutral – for example, if we don’t know the size of something, we ask ‘how big is it?’ or ‘how tall is it?’ (not ‘how small is it’ or ‘how short is it?’).

The word degrowth is part of a movement to reframe how we think about growth and development. On the face of it degrowth is a very straightforward formation, meaning the
opposite or reversal of growth, and we’ve found evidence going back to the 19th century in this general sense – usually with negative connotations. But in the 1970s, various intellectuals started using the French word décroissance – meaning degrowth – in critiquing the ideology of economic growth and its consequences for the environment. As this has become an international discussion, the English word degrowth has followed suit. It is increasingly used in positive ways, and degrowth advocates – or degrowthers – express the view that reducing economic output and consumption is compatible with – and, indeed, ultimately essential for – wellbeing and prosperity. As Greta Thunberg said in her statement at the UN climate change summit in 2019, we can’t carry on with our ‘fairy tales of eternal economic growth’.

**Tania:** My choice for the Green Glossary miscellany is the verb monkeywrench: ‘To sabotage, disrupt, or damage as a form of environmentalist protest.’

A monkey wrench is a type of adjustable spanner, a useful addition to every toolbox: the noun is recorded in the OED from the early 1800s. By the beginning of the 20th century, it was also being used figuratively in phrases like *to throw a monkey wrench into the machinery*, which means ‘to cause trouble or confusion’ or ‘to interfere disruptively’ (you don’t need to be a master mechanic to know that dropping a tool into the moving parts of a machine is bound to cause problems). *Throwing a monkey wrench into something* is an American equivalent of what British speakers would call *throwing a spanner into the works* (*spanner* being the usual British English word for what American English speakers call a *wrench*).

The use of monkey wrench in this phrase seems to have given it a bad reputation as a troublemaker or agent of sabotage. This can be clearly seen when the noun starts being used as a verb – an etymological process known as ‘conversion’. By 1912 ‘to monkeywrench’ was being used to mean ‘to disrupt, obstruct, or spoil’ something: so if you monkeywrench someone’s plans, for instance, you’re likely to ruin their day.

And this, at last, brings us to the green credentials of monkeywrench: from the early 1980s, the OED records the verb used specifically in the context of environmental activism, meaning ‘To sabotage, disrupt, or damage as a form of environmentalist protest.’ Our earliest evidence for this sense is implied in the noun monkeywrenching: in 1983, an article in the LA Times quotes a founder member of *Earth First!*—an early direct-action environmental protest group—using monkey-wrenching as a word for their favourite tactics of sabotaging industrial sites and machinery.

This ecological turn in the semantic history of the verb monkeywrench didn’t come out of nowhere though. It was motivated by the title of American author Edward Abbey’s 1975 novel *The Monkey Wrench Gang*, which follows a group of ecologically-minded misfits as they fight to stop developers destroying America’s endangered desert regions by destroying their bulldozers and trains. This book had a huge influence on the American environmentalist movement at this time. It’s no coincidence that our early evidence for ecological uses of monkeywrench and monkeywrenching come from the *Earth First!* movement: Abbey’s novel was one of the main inspirations behind the formation of the group in 1980. And when it came to choosing the group’s logo, the members chose a cross made of two tools: a stone hammer and—**you** guessed it—a monkey wrench.
Chris Sowton: In our second interview this week, we talked to Angelica Manca and Andrew Robinson.

Angelica Manca is the co-founder of Hoopla Education, a company which specialises in nature-inspired sustainable education starting in the early years. Welcome to the podcast, Angelica

Angelica Manca: Hi

Chris Sowton: Andrew Robinson is the publisher for Asia and Global ELT for National Geographic Learning and has almost 25 years' experience working in the language publishing industry. Welcome, Andrew

Andrew Robinson: Hi Chris. Nice to be here.

Chris Sowton: So Andrew, we'd like to begin by asking you to talk specifically about some of the National Geographic Learnings recent ELT books such as Time Zones and Pathways, and how you approach the topic of the environment?

Andrew Robinson: What we did was, we matched the topic of climate change alongside the language function of making predictions about the future, so you come up with sentences like what will Earth be like in 20 years' time, do we think food prices will increase, do we think temperatures will rise. So for this real content, we derive specific language points. Now, you know, in this particular unit we have an interview with a National Geographic Explorer, Mark Lynas who's an environmentalist, what we would do is contact the explorer, in this case, give him interview questions, we're going to get his authentic response but we're also going to sort of script it, make it level appropriate, make it the right length and so on so it's manageable for students but also hopefully interesting. So yeah, we closed the unit with a video about renewable energy, because we're very conscious of not being negative, so relentlessly negative, even though some of the information on the topic is sort of by its nature, not very positive, we would like students to feel that they can get involved that they have agency, that they can make a difference.

Chris Sowton: Do you feel that sort of honesty about the situation is very important in the books?

Andrew Robinson: I think you can be judicious about, you know, I think there's this content and one of our books I was thinking about today where we talk about the five countries in the world that have the best record currently when it comes to using energy from renewable sources. Now we could have focused on the five worst countries in the world but that would be equally factually true, but obviously much more controversial so I think it's probably just approaching the topic in a particular way that is true, but constructive.

Chris Sowton: Fantastic, thank you. Angelica, one of Hoopla Education's sort of biggest projects that you've been working on is the ELTOn-winning The Garden Project. Could you say a little bit about this project and what it's trying to achieve?

Angelica Manca: Yeah, so The Garden Project is a project-based learning programme that combines PBL, with the STEAM platform, but most importantly it addresses a younger age group. And the idea here is to really connect children to nature, because as the younger
generation is, they're going to be the stewards of our planet, we really want to foster that sense of love and wonder and connection with nature. So what we're doing is, we're following nature's lifecycle and introducing the content language learning based on the lifecycle of edible fruit and vegetable plants. So throughout the projects, there's a very strong hands on sensory component so children are learning in a contextualised environment where they're actually getting to grow the seeds of their knowledge, so to speak.

Chris Sowton: Their learning is growing at the same time as their plant’s growing.

Angelica Manca: Exactly yeah that's the idea. And so by making concepts as concrete as possible. It also helps them understand and apply language in the physical form.

Chris Sowton: And how do you introduce the language elements, alongside the project-based learning that you do?

Angelica Manca: Because we are applying project-based learning, we have a green question at the beginning of every lesson, and that green question frames a question related to an environmental aspect. So for example in the first lesson of the first unit, we're talking about why it's important to know what season we're in, and then every activity is exploring that question from different perspectives, related to the STEAM framework. So it might be explored from science, and might be explored from an artistic point of view, technology, engineering and maths, and then the language gets scaffolded at the beginning of the lesson, prior to actually running the activities, the hands-on activities.

Chris Sowton: And do you find that the students are often so engaged in the topic that they start asking for additional language.

Angelica Manca: Absolutely, and because there's so many ramifications in what they're doing that does spill outside of English language learning, then it's also bringing in, or tying in learning from other subjects in their native language, for example. And so that's just an overall enriching experience.

Chris Sowton: And to come back to you, Andrew. You were, you were talking a little bit about how National Geographic Learning has developed its materials with the environmental focus, do you see there's been changes in how you or other publishers have approached the issue, compared to how it was done five, ten, 20 years ago?

Andrew Robinson: I mean, it's obviously a topic that's become more and more important I think but actually I was looking at a report from the OECD PISA results for 2018 and that was the first time that global competence was included as an element, and the research there showed that 72 per cent of teachers were already teaching climate change in classes, literally, the number one issue, and the same year World Economic Forum Global Shapers survey showed climate change was the number one global issue of importance to teenagers, now it's probably Covid, but it's, it's been increasingly important in recent years. So I think all publishers have probably included this as a topic in their books. I think for us in particular at National Geographic Learning it's part of our DNA, you know, because of our partnership with the National Geographic Society, because our goals align.

Chris Sowton: And as a global publisher, you're based in Singapore, other schools in other countries will also be using those books. So how do you ensure that those core messages...
are there which are applicable in all situations but also there is that local relevance and local appropriacy within the books.

Andrew Robinson: Yeah that's a great question. I mean, it's really one of the challenges of publishing globally on any topic really. One comment I have heard from teachers, some teachers would occasionally say they found the topic of climate change to be a little bit remote from students' lives. I think we've tried to take that on board in terms of introducing more sort of personal stories, you know, I'm thinking of a story for example in a reading series that we have about a young guy in Greenland, called Malik, and he lives in a small town that relies on seal hunting and fishing, but his community has been devastated by climate change, and most of his people of his generation actually move away, but he's kind of deciding what to do should he move should he stay in support his grandmother, you know, in a way that his life is so remote from the life of a student in Tokyo or a student in Buenos Aires, but in other ways, it's in the human element, I think it's very relatable.

Chris Sowton: Thank you. And for you, Angelica, The Garden Project is using several countries as well, how do you see that contextualisation?

Angelica Manca: Yeah that's a good question and it was something that actually motivated us in creating The Garden Project. So we were travelling extensively throughout Asia and Europe and United States and we saw that children in Hong Kong, for example were doing snowmen in December or in Qatar, they were doing scarecrows and pumpkins in October and we thought there's something that doesn't really make sense here so we thought it was really important to tie the learning with their local fruits and vegetables. Which is why we have the teachers do a little research with the children on what is seasonally available and and locally available and then they followed their seasonality, based on their plants. And then a big part of what we, our strategy is, is to work with local publishers, so we have a partnership with Macmillan Spain and Macmillan Brazil to localising the content. So actually The Garden Project Brazil edition was the version that won the ELTons, and that was just a fantastic experience where we, we tropicalised, so to speak, the content. So instead of talking about rhubarb, we talked about mangoes so that it really made the content relevant to the children who are studying.

Chris Sowton: And it's a fantastic new word Angelica tropicalised! I might have to use that! Yeah, but it's interesting what you're saying so global culture may be spreading in, in different countries and that, sort of, can work very well but the growing conditions and the weather conditions are unique to those particular locations so it somehow sort of marrying those two things together.

Angelica Manca: Yeah, and actually, I'd like to go back to what Andrew was mentioning. We had a fantastic experience running The Garden Project when in three different countries at the same time with four- to five-year olds, and we, are opening unit talks about climate, and so all three classrooms. So we had a classroom in Berkeley, United States, we had a classroom in Pakistan, and we had a classroom in Beijing in China, and they were all running the lessons at the same time and when we were talking about the weather and weather patterns, the children in Beijing saw the image of the clouds, and they associated that with smog and not being able to go outside because of the heavy smog in Beijing. Actually I was literally involved in this class so I was with the children and we talked about that. And the children in Berkeley, obviously the children in Berkeley couldn't understand why they were talking about smog and what, why the children didn't see it as cloudy and the teacher in Beijing used that as a way to explain that since there's manmade weather
conditions, and there's natural weather conditions. And shortly afterwards in Berkeley they experienced the forest fires, and the children in Berkeley made that association on their own saying: Oh, now we understand this cloudy weather, preventing you from going outside and they were able to relate with the children in Beijing.

**Chris Sowton:** It's a fantastic example of inductive learning you're sort of, you're creating their platform, you're giving them the opportunities and the information, and they're working a lot of it out themselves.

**Angelica Manca:** Yeah

**Chris Sowton:** Which is fantastic. Andrew, if I could come back to you, National Geographic Learning is a large international publisher, what steps are you taking to minimise your own carbon footprint?

**Andrew Robinson:** I think one thing we have been doing is minimising our use of plastics and maximising use of recycled materials. We've eliminated CDs recently from our offerings, we're moving towards eliminating other physical media as well. We used to use things like highly lithographed fully wrapped elaborate box sets. And we've replaced those with craft corrugated boxes with small stickers. And then of course we're moving more and more towards digital. So, more and more eBooks and more electronic offerings.

**Chris Sowton:** And just one final question to you both. Let's begin with you, Andrew, just how do you see the landscape in the world of ELT over the next ten years with regards to the environment?

**Andrew Robinson:** The shift to digital I think is the most obvious thing but you know, again, incredibly hard to predict, if I had to really predict whether print books will still be here ten years from now, my guess is that they will, but the shift towards digital is certainly coming and we're going to be somewhere on that spectrum. I mean, for us, I mean this is actually really good news, like digital gives us a lot more flexibility when it comes to delivering authentic content, we can be more dynamic, we can update information more easily. And we're not constrained by the page which actually is, it's quite a big constraint when you, when you publish materials just trying to fit everything within those dimensions.

**Chris Sowton:** Yeah I think that's a really interesting point is, as you say, with an issue like the climate crisis which is, by definition, very very fast moving. That could be a crucial issue for publishers moving forward that ability to respond in a time sensitive way.

**Andrew Robinson:** We've seen how much textbooks have evolved just in the last 20 years or something like that, that when I look back I mean, some of the stuff that we would publish in the late 90s and when we look at today, how much things have changed. I think we've seen English become a global lingua franca in the last 25 years and I think that's certainly something that's going to change I think in the next ten years. We're going to move more and more in that direction, you know distinctions between British and American English are becoming completely irrelevant. I think all this stuff will continue on that trajectory.

**Chris Sowton:** And for you, Angelica, how do you see the next decade?

**Angelica Manca:** I think that the internet and digitisation of material does offer a lot of flexibility. I think that we need to be careful as well, because the internet does have a whatever.
growing carbon footprint. And I think that there needs to be more transparency in terms of what our footprint actually is, and it's easy to forget that because we don't actually see it. So I think the transparency factors is really key and as is for everybody moving forward. But the more we can communicate together like that, the role of English will change and as opposed to being the main goal, it's more of how can we communicate these ideas and work together as being our end goal really

Chris Sowton: Fantastic, Andrew, Angelica, thank you very much for your time.

Angelica Manca: Okay, thank you

Andrew Robinson: Thanks very much.

Chris Sowton: Many thanks to Angelica and Andrew. Please make sure you visit our show notes to find out more about their work.

That's all for this episode of the Climate Connection. Join us next time for our final episode. Episode 10: Future Perfect, where we explore how language learning, and the climate crisis should not be looked at in isolation, but rather how they are related to wider social justice issues, until then, goodbye.