

Episode 7 – Steve Puttick

Transcript

Heather Sherkunov

Welcome to Education Explored, the Department of Education at the University of Oxford podcast. We've launched this series to explore all things education, from teaching to research to finding out why we're one of the leading departments in the country and the world. I'm your host, Ella Sherkunov, and this is episode 7 and our penultimate episode in series one of the podcast. Today I'm delighted to be joined by Associate Professor of Teacher Education, Steve Puttick. Steve is a qualified geography teacher and was previously the head of department at a comprehensive secondary school in Oxfordshire. He's principal investigator on projects such as Net Zero Ed and leads the education and teaching for the climate, otherwise known as the ETC, hub. He is also a qualified mountain leader and rock climbing instructor. Hi Steve, thanks for joining me. Hi, thanks for having me. So lots to talk about, but I wondered whether we could start with some of your research. World Environment Day was on the 5th of June, and we've been exploring what our department works on, which is linked to the environment all month. Coincidentally, coming to an end this month is the Net Zero Ed Project. The project looks to address the question of how can curriculum designers provide better net zero education. for the next generation. So tell me about the project.

Steve Puttick

So the project is what's called an agile sprint. So it's funded through NERC and the Oxford Martin School. And the whole kind of vision of agile is to try to provide kind of solutions focused, policy engaged research. And so working from a kind of a problem. And in this case, the problem being that net zero has become kind of huge in terms of how we're thinking about climate change, how we're discovering ways of solving it and global targets. And so that whole kind of global conversation is really focused many ways around net zero, and yet it doesn't feature on the curriculum at all. And so our kind of premise is that we need to improve the public debate about net zero. We need to have education that brings people into that conversation and equips young people to be able to really take part in that. And so we're thinking about ways of doing that. We're doing a range of things, kind of collecting empirical data in schools, so watching lessons, videoing lessons, interviewing teachers, doing documentary analysis and other things. We're then bringing that into dialogue with an interdisciplinary group of experts. So we've got people from across the university, including from history, from maths, from earth sciences, geography education and many other areas, and trying to kind of bring that practice in the classroom into dialogue with the kind of latest understandings

of some of those things. We've got partners in DFE and looking to see how can we make recommendations that then have this kind of longer term goal of improving that public discourse about net zero. Because it's an area that you've seen really kind of weaponised and has been kind of explored quite differently in the media and separated from the kind of big problem of global warming. and then kind of discussed in different ways. And so lots of misconceptions to address and lots of areas in this really kind of fast moving field of climate change research and then net zero in particular. So trying to kind of leverage loads of Oxford's kind of huge amount of resources and expertise on net zero to improve some of that education that's happening in classrooms.

Heather Sherkunov

I think the majority of our listeners will know the answer to this, but just in case, what does net zero actually mean?

Steve Puttick

So net zero is getting to a point where you're not increasing the cumulative emissions in the atmosphere, particularly talking about carbon because of the nature of the life cycles. And so that plays a particularly significant role on future warming. And kind of part of the hope of net zero is that once you reach a point of net zero, then you effectively stop further warming. And so it's not like there's huge kind of warming that's locked in based on kind of the problematic stuff that we've done up to this point, but you reach that point and that means that you then effectively stop further warming. And so obviously there's a kind of a case to say that you need to then kind of do further extraction and to kind of bring that down. But understanding kind of what that is and then how you get to that point is then where the kind of the detail all is. And so the first kind of level in improving the conversation around it is just improving that understanding of what this idea is, what the concept is, and what the kind of evolution of it has been. And so the kind of the famous Paris Agreement that talks about wanting to limit for the warming to kind of 1.5 degrees, doesn't use the term net zero, but talks about achieving this kind of balance. And so partly it's a fascinating concept in terms of understanding the evolution of it and then a really important idea to then be able to debate and to critique and to reach as well.

Heather Sherkunov

In your opinion, how achievable is net zero?

Steve Puttick

I think it depends who you ask, obviously, because it is hugely complex. And that's why we've got such a kind of a wide range of interdisciplinary expertise on this. Miles Allen, who in the university kind of has been a huge part of the Oxford Net Zero work and kind of a huge role in terms of climate science more broadly. But there's a kind of a short TED

talk that I think is a really interesting kind of response to this question is that he describes being in a room with engineers from a big oil company and saying to them, okay, could you, like don't worry about how much it costs, whatever, could you make your whole business net zero now, could you stop this contributing to further emissions? And he says that they kind of like said, well, like, will other companies be subject to this? Like, yeah, sure, okay, let's do this. And these kind of questions are like, and then very quickly they're like, well, yeah, of course. And then he's kind of, okay, well, why aren't we doing this? And you see kind of senior managers kind of like nervously looking at their feeds and shuffling around and all the rest of it. And there's this kind of huge gap between like what we can do and what we can achieve. However that happens, and that's where it's really contested. And so some of the critique of net zero is that it just kind of pushes the problem into the future and so relies on what people call a kind of technical optimism. that you say, don't worry, we can keep doing everything we're doing today, in the future, clever people will solve this, and that's fine, rather than saying, no, it needs some really kind of radical changes now, it needs to reduce emissions now. But the kind of conversation around removing carbon from the atmosphere and so on and the role that those particularly big oil companies can play in that means that like absolutely this is kind of achievable. Like the scale is immense and there's no kind of underestimating quite how much you need to be able to extract and how hard some of that removal will be. But at the same time, like absolutely kind of achievable. It's interesting when you look at the amount that those particular companies kind of spend or don't spend on research and development, that they're kind of, they really hold the keys to kind of the solutions for all of those things. But at the minute, make so much money for shareholders and others that the kind of the political will to do that then isn't there. And so that kind of business's normal model still keeps going. But I think that there's also lots of other signs of hope that are exciting. So looking at the ways in which countries like China are kind of rapidly scaling up solar and other electricity generation in a way that kind of moves away from that fossil-based one. So I think in some ways I would say I'm like relatively optimistic about some things, but at the same time the kind of the continuing increase of those things and the lack of like political will and ambition like more broadly is a huge barrier as well.

Heather Sherkunov

Taking it back to the classroom, climate change education is more and more prevalent, but you're potentially worried about the quality and maybe that's what this project is looking at as well.

Steve Puttick

Yeah, exactly. So teachers who are doing an incredible job are incredibly busy and obviously that won't be used to anyone listening to this. But say in the subject like geography, teachers are expected to understand and know the whole of geography.

Now if you speak to any academic working in this university, none of them know the whole of geography. They really kind of know their own particular sub-area and niche. And yet the teachers are expecting to kind of reuse phrases like keeping up to date with the subject and making sure that they're kind of keeping really an active dialogue with that discipline, which is always an impossible task because there's so much research being produced, those debates are so kind of contested and so fast moving. And so the task for teachers in terms of understanding a really rapidly changing area is just so hard. And so even the most conscientious teacher just is not able to engage with all of those debates. There's also the kind of deep interdisciplinarity of those debates. So something like climate change, we're working on a set with a number of different subjects. I've mentioned someone who sits across kind of physics and geography and the ways in which all of those different debates and different knowledges contribute to this. means that actually we're kind of expecting something hugely complex. And so when teachers are thinking about how to explain some of these concepts, how to understand them and how to kind of present them to students, then there's a few things that are happening. One is there's kind of the availability of different resources. There's the knowledge that they were taught maybe on a degree or other CPD. And then the kind of the ways in which some of these things are kind of changing now. And so that kind of question about quality is a massive part of it. And partly it's about the kind of sources of information we're using and the ways in which then we're kind of arguing from these different things and trying to introduce students to a good understanding of these big ideas like uncertainty and so on that so quickly get weaponised, but we want to equip them with the skills so they can really kind of engage in that debate.

Heather Sherkunov

This year's Awareness Day is focused on climate action. How can teachers help young people not only understand the transition to net zero, but feel equipped to participate in shaping it?

Steve Puttick

Yeah, so this is really kind of at the heart of some of the debates, and I would point people to the recent special issue of the Oxford Review of Education that came out of some of the work that we did on the education training for the Climate Hub. But as part of that work, there's a paper, James Robson and others here, and Bill Finnegan, who's kind of been a huge of leading lots of the university level kind of work on climate education, so leads the Vice Chancellor's Colloquium and other things that have really kind of engaged deeply with these questions about climate change education. But the kind of debate or the tension is around individual action or kind of system level change. And so school geography has often gone down the route of individual action. So teachers saying to students, It's really important you turn off lights when you leave rooms. It's important we reduce water usage. It's important that we do these other kind

of individual level things. And part of what we argue is that some of the broader psychological literature points to some of the potentially negative parts of that. And so you get this one kind of concept of overcrowding. And so if you're doing those things, then the kind of the assumption potentially is that, okay, that's good. That's going to help solve it. I don't need to do anything else. when actually those tiny actions are doing almost nothing because of the vast scale that we're talking about in terms of industries, energy production, transport, farming, and everything else. And so the kind of argument that we're making there is that those big system level changes are really what we want to be thinking about. And we want to be really wary about kind of making it about these individual choices. And the other kind of aspect of that is the ways in which, again, some of the kind of the big oil companies have really kind of encouraged a kind of individual responsabilization of it. And so we think about individuals' carbon footprints and do different things for them to be able to map them out and so on, which then focuses all the attention on that individual and what they're doing. And partly we want to say that individual's role is tiny in this. Let's have a look at and these other things that are happening and these other big players. So the kind of the question of how much education leads to then individual action or how it leads to what we've talked about in terms of a kind of shifting public discourse and improving public debate about these things. I think it's a really live one. And yeah, one that's definitely unresolved and that teachers take a really different view on. And so some of the teachers in our work and in our research are huge advocates for it leading to that kind of individual change and really encouraged by seeing the ways in which their students are then kind of taking on these individual actions and doing these different things. Whereas others are far more sceptical of that and they're kind of saying that that's kind of moving into an idea of kind of indoctrination that education shouldn't have a role in and it should be teaching them more in scarecrow, subjective stuff and then letting students decide what they want to do. And yeah, those things are absolutely not resolved. There's a paper that I'm working at a minute with another colleague, Nigel Fancourt, who his recent work on looking at controversial issues and some of the legal aspects of that. and some of the kind of the past stuff that's happened, including there's a video that Al Gore produced on Inconvenient Truth that then the government circulated to schools. And the case kind of around that and the precedent that some of that set is really interesting. So we're like thinking about those kinds of questions as well and the way in which you balance freedom of belief and freedom of thought with some of the really pressing, urgent challenges that climate crisis and ecological crisis forces on us.

Heather Sherkunov

You mentioned there that the oil companies have been a big proponent of the individual action. Is that to take the spotlight away from them?

Steve Puttick

Yeah, exactly. So the sceptical reading of some of that is that it does this kind of shifting of the level that you want to be looking at, so down to individuals from core systems. and places the responsibility on, again, individuals and their individual choices rather than the bigger producer of that. So, I mean, again, it's an argument that Miles Allen's used about finding out that your dishwasher tablet has microplastics around the edge of it. And he kind of says, if you found that out and you thought, okay, these microplastics going into the water system and doing all those things that they do to ecosystems, as we know, What's the rational response to that? Is it to say, okay, I'm going to stop using that tablet? Or is it to say, maybe the people that are producing 10s of millions of these tablets a year, maybe they could change the roughing that's on them? And so that I think it's a useful illustration of that kind of like the scale at which these things really can be addressed, not at the individual level, but at that systemic massive level.

Heather Sherkunov

So you're coming to the end of the project, and particularly for listeners who don't know very much about research, what does that look like? What will you do with the information? And then how do you create impact from it?

Steve Puttick

Yeah, so like I said, that's a relatively quick project. It's kind of a year long. And because of the kind of the policy engaged nature of it, then we've been speaking to colleagues at DFE across the full length of the project and engaging some of the insights, the findings, the arguments that they're making through that. It comes at a point when there's a big debate about the curriculum, and obviously there's been a curriculum and assessment review. There's then been various different groups involved with that. So I sit on one of DFE's H&S sustainability, it's about working groups, and so engaged in some of those conversations. there and there's a sense in which we hope that the new curriculum will do more to engage students in these big questions of climate change, maybe net zero particularly, but will enable that of equipping to be involved in that conversation. So there's an aspect of policy change that we're really interested in. And the teachers that we've been working with, we're funding a day of CPD. So they're coming to Oxford for a day and there's various different colleagues from across the university who are then providing various aspects of that input, insights into their research and ways that those teachers then engage in that dialogue and discussing together and thinking about how these things might affect their practice. And then there's various different ways in which the project's leading to different outputs across some different publications. We have a youth advisory board that have been really engaged in aspects of it and have been producing some amazing stuff recently. One of my colleagues at Amelia Farber has been leading and so there's things that are happening through there as well and they've been producing in some, I think, some really great language, a glossary of some of

these terms. And so there's some other different kind of resources that have been made available for teachers and for others through it.

Heather Sherkunov

So the hope is that the impact goes straight back into the classroom and some of the theory and thinking around it.

Steve Puttick

Yeah, exactly. And I think that the question of teachers' engagement with research and how teachers are using it, I mean, varies massively in different ways. There's some journals that I'm involved in and that speak particularly to geography teachers and there's some aspects that I'm always keen in my work to be engaged in those academic debates, but also kind of thinking about the ways in which teachers are engaging with those discussions too. I mean, on our kind of PGC course here and the MLT course, that we have teachers, beginning teachers, and then more experienced teachers who are engaging in some of those things. And that's always a brilliant environment to engage in those conversations to think about the ways in which some of that research works out in the classroom and affects practice.

Heather Sherkunov

You mentioned about policy there. So how does the political landscape affect how climate change is taught in schools?

Steve Puttick

Yeah, so there's been obviously an area that's been really contested and many of the critiques of the current geography curriculum are to say that it looks wildly outdated because it doesn't really engage in these ideas of climate change. There's little bits of and have carbon cycle in A level, but the central place that climate change has taken in so many different debates in terms of academic disciplines and public discourse and so on, means that there really is this big gap between what the geography curriculum and other curricula currently do and what they might do. And so there's some, it feels like some quite obvious ways in which that might develop. There's always as well a difference between that formal curriculum and then the curriculum that actually happens in classrooms. So whereas people have talked about curriculum as intention and curriculum as reality. And it's an area that many teachers feel really passionate about. And so the kinds of things that people actually do in a classroom, there are differences between what you see on the kind of formal curriculum and then what you see in practice. But my view is that the exam specifications are always the things that drive the most change. You might think of that negatively in some ways. So you've got a recent paper called Examification and thinking about some of the ways in which this real dominance of the exam systems then affects the kinds of knowledges and people's

experiences and affective dimension and temporal aspects and lots of other things. But really, once you get some of those ideas into exams really well, and if you can do that really skillfully, then that makes a huge difference in terms of scaling it up. But again, we've still got this big question of how... how you engage with a rapidly changing field. So what we know about climate change keeps changing, the kinds of data that you might use, the ways in which the discourses and global governance and everything else is shifting, that is all shifting. And so if you've got something that's really being reviewed on a once a 10 year maybe basis, then there's a real challenge there for how you keep that knowledge update and current.

Heather Sherkunov

And the changes between the curriculum on paper, as it were, and what is taught in the classroom, would that tend to be down to the individual teacher, maybe their interest? What would that look like?

Steve Puttick

Yeah. So in different schools, it looks really differently. And one of the things that we've seen over the last, I don't know, maybe 10 years, is this increasing fragmentation of what happens in terms of who decides. And so some critique has been made of larger multi-academy trusts that have had a very centralized approach to curriculum. And so they've decided actually to improve consistency, we need to make sure that everyone's doing more of the same stuff. Teachers are really busy, we need to make sure that they've got access to kind of all high quality resources and so on. And the tension that then pulls against is individual teacher autonomy and their professionalism and so on. But there's some senses that centralisation at a multi-academy level means that decision about what gets taught sometimes is kind of centralised and so teachers can have less a role in that. In other situations, then teacher autonomy is kind of massively increased, whereas availability of those central resources can decrease and there's a continuum or attention that goes along. And so in some cases, teachers will have huge freedom, particularly in primary and key stage 3. Whereas if you move into GCSE, then really it's that exam system and the exam specification. And that then becomes far more consistent across the full breadth of schools that achieving those particular grades drives the kind of knowledges that get taught.

Heather Sherkunov

So as the political landscape changes and flux and moves around, so do all these decisions and then the impacts on teachers sometimes for the good, sometimes for the bad.

Steve Puttick

Yeah, definitely. And the way in which the climate debate has happened, and particularly this idea of net zero that then gets, I used the word weaponized earlier, but gets weaponized in these. And there's a colleague at the Relatives Institute here, so I'm pointing down the road to where it is in Norham Gardens. James Painter, who's done some really interesting analysis of the ways in which net zero is used in the media. And so he points to this really clear trend over time of a separation of net zero from the problem, so from global warming, and looks at the ways in which separating out these terms then kind of have particular ramifications. But by separating them out and not saying, we've got this huge problem with global warming, what we need to do is to reduce the carbon emissions and get to a point of net zero. And so you have that kind of really strong rationale that there's huge agreement on now. And then you have this policy target that then obviously works out in various different ways. But by separating those out and not talking about the problem that it's trying to solve, then we just get these headlines about net zero is going to reduce economic development, it's going to cut these different jobs. It can cost this amount. And so that analysis, I think, shows one way in which the public discourse about it is really problematic and doesn't have the richness and the breadth and the full logic of like what's the problem we're trying to solve and what plays and how does this play a role in solving that?

Heather Sherkunov

I should say we're currently recording in Oxford down the road from the Reuters Institute. I think this is a really obvious question, but I'm going to ask it anyway. Why do you think good education on our climate and the changes within it is so important right now?

Steve Puttick

I think in some senses it's obvious because of the understanding that we've got now about the changes that we've experienced in the climate, the ways in which those changes are so unequal, and so the ways in which countries who historically have not contributed to these issues disproportionately are facing the kind of risk and vulnerabilities that the impacts of it cause. There's a huge justice question that's really timely and that needs to be solved yesterday rather than even seen in the future. So there's a huge need for that from many different angles of particular justice questions. There's also the huge issue of young people being really engaged in these questions. And so you'll find a huge range of views are put amongst young people, but a huge amount of energy and desire to understand more. And we've seen lots of ways in which through school strikes and other actions, young people really clearly expressing this desire and this belief that their education isn't giving them what they need. And I think there's also the more kind of knowledge type question that there's been lots of arguments about the ways in which students should be engaged more with disciplinary knowledges and they should really be brought into those debates and some people

have used this idea of powerful knowledge. But whatever the argument is there, then it's really clear that academic disciplines are really actively engaged in thinking about climate change and thinking about the ways in which we understand it, thinking about the ways in which we mitigate and adapt and so on. And so from that perspective as well, there's a really clear argument for engaging young people more in these kinds of conversations.

Heather Sherkunov

I'm interested in what you just said then about that different countries who haven't engaged are now seeing the impact. Is that because they haven't taken any action, whereas other countries who are engaged in the conversation have?

Steve Puttick

So in some ways it's related to the global distribution of those countries. So people sometimes talk about like broad framing of a global north and global south. But the ways in which countries, partly because of infrastructure, partly because of the ways in which pre-existing vulnerabilities are then kind of exacerbated because of this, and those countries, in scare quotes, like level of development means that there hasn't been the same carbon emissions to this point. And that's the historic not contributing to this problem, but then being in positions of actually facing some of the worst vulnerabilities. So some of the Pacific Islands and others are really obvious example of being really vulnerable to sea level rise. And so you have this really problematic issue of countries who have really not contributed, then facing some of those impacts. And in other places, the ways in which increasingly common and severe hazards like hurricanes, say, or cyclones, then leads to this problem of it causing increasing levels of damage and so on. Whereas for others, the ability to insulate from those risks, having much lower pre-existing vulnerabilities, and then being able to essentially buy a way out of other stuff and to be able to pay for whatever it is that needs to happen in that situation, means that the world could warm considerably. And us sitting here in this room in Oxford, be maybe sunburnt slightly more, have kind of warmer things, maybe install some AC or whatever, but really you could have a world that changes significantly and day-to-day life here could then go on almost unchanged, whereas... In many areas, that's not the case at all. We've already seen huge impacts, whether that's through increasing extreme heat events that then leads to various aspects of death, the ways in which that knock-on affects the crops and others, and this kind of increasing extremities that you get in terms of like increasing extreme rainfall events. And some of that affects the UK and affects parts of that. But obviously in other areas, it has much, much more kind of devastating impacts.

Heather Sherkunov

Do you think it's so important to young people today because we see the effects more and perhaps their parents are of an age where they certainly weren't aware of the effects and then suddenly were. And do you think that's translated into the young people sort of being really mindful of it?

Steve Puttick

Yeah, I think that some of that kind of visibility of stuff that's going on across the world that you get through social media for good or for ill. But I think there is increasing visibility of some of those things. I think that the generational inequality of it, I think, is something that's really like motivating to young people as well, where they see a problem that's been caused by a past generation that now is kind of really obviously going to be felt far more by them. But I think a part of that, like you never have to teach a child what it means for something to be unfair, right? And the youngest child understands this concept and is really kind of like devoted to it. And so I think that some of that unfairness and then both in terms of a generational thing And then this broader country level where you see and they see then countries that obviously have contributed far less to the problem, but already are facing far more devastating impacts. And so a part of that issue, I think it's really motivating. One of my friends has a book called Climate Change is Racist, and he looks at the ways in which exactly this like vulnerability and this disconnection between the causes of it and then feeling the effects of it goes along these lines that in many ways are quite racialised and classed and everything else.

Heather Sherkunov

We've talked a little bit about the ETC hub, but I wonder if you can tell us a little bit more about it. and that sort of interdisciplinary aspect and why that's so important.

Steve Puttick

Yeah, so the ETC hub, this interdisciplinary hub, we got funding through the social science division to try and bring together people from across the university. So there's a huge amount of work that's happened. I mentioned a little bit of it in this conversation, but a huge amount of work that's happening across the university. And we were really keen to try and facilitate some more of those conversations and to bring people together who are interested, not only in research on climate change, and then thinking, how does this work out in an education and training context? And so, we've been really delighted to bring together so many different people, I said, from all divisions and GLAM across the university. And I've had so many kind of really fascinating conversations around that. And the idea of that hub was always to facilitate those conversations and then hopefully for it to be something that then inculcated other stuff. And so this Net Zero Ed project then really kind of came out of that, as we project come out of it, and then other different projects that have emerged from it and have come about through

some of these conversations and these collaborations. As I said, that Oxford Review special issue that came out recently on education training for the climate was kind of one part of that coming out. We've moved from the hub being a more active in-person thing to facilitating often webinar-based discussions and so with colleagues coming from around the world and say a couple of times a term that we've had these kinds of discussions, most recently with some Carib Ox fellows and say so delighted. And Bill Finnegan hosted a colleague from the University of the West Indies. And so Shanika was coming and speaking about her work there on climate education and the various ways in which then that collaboration is kind of moving forward.

Heather Sherkunov

Why do you think geography is one of the most important subjects for understanding the modern world?

Steve Puttick

Yes, so it's like a classic geography teacher question that repeated so many year 9 options evenings to get students engaged in it. Is he time to pitch? Yeah, it's funny because, well, so when I was teaching in school, the amount of parents' evening conversations that I'd have with parents saying, like, oh, this sounds amazing. I wish I'd done geography. It wasn't like that at school when I did it and so on. And I think partly that's because of the way in which I really engaged with really wide range of current issues and say the kinds of stuff that people are thinking about, the kinds of stuff that they're worried about or excited about, that it's really engaging with those issues. and it has this massive breadth, which some people see as part of it as weakness because it's like a jack of all trades and master of none. But the ways in which you are engaging so naturally with colleagues from across humanities and across natural sciences, so that NERD project is funded by NERC, the Natural Environment Research Council, whereas another project that I've just finished is funded by the British Academy and there's a collaboration with colleagues across history and languages. And so that's looking at some research with colleagues in kind of Portuguese studies and other areas. And so there is this real sense of, even in my way, speaking to scientists, mathematicians and physicists and also humanities colleagues to try and understand something of this like crazy complexity that is the world.

Heather Sherkunov

And thinking about you personally now, is that what first attracted you to geography or why was geography the subject for you?

Steve Puttick

No, it was the mountains was what attracted me first. It was like really, definitely like the mountains that I really loved climbing and mountaineering. And so when I chose like

a degree to do, then I really wanted to go and do geography so that I could be in the mountains and understand more about the mountains. And actually, my first degree was geography with mountain leadership. And so it was kind of single on geography degree, but also you did this mountain leadership qualification alongside it. So they've changed some of the modules that would look at climatology or weather to be like mountain weather and then there would be outdoor skills and then go away and do this extra qualification on the side of it. And so that was like a big part of my motivation. But it's funnily enough because across that first degree my interest really shifted quite a lot and And I ended up getting really interested in some of the cultural geographies and the human geographies and some of the aspects of philosophical geography. And so the final dissertation ends up being around these ideas about post-modernism and so on. And there was nothing about mountains in there. And so there was a real shift. And I think that's part of what I'm really excited about with geography is both this ability to be engaged deeply in what's obviously the natural world, but also to be able to problematise what we mean by financial.

Heather Sherkunov

Do you still get a chance to go up into the mountains and go off and do climbing?

Steve Puttick

A little bit. Mostly my children mean that that's like a less frequent and I spend more time on the side of a football pitch and coaching football and doing these things. But I love being in the mountains as well. I saw Everest in person for the first time the other week when we went to Bhutan with colleagues from here and doing teacher education work in Bhutan. Yeah, there's a part of my connection with geography that I think always be really deeply engaged with, like mountains in particular, but other aspects of the physical side of the discipline. But yeah, you always have not enough time to do these things.

Heather Sherkunov

Do a lot of geography teachers have that outdoor aspect?

Steve Puttick

Yeah, my experience is that there is a huge amount of that and that a huge amount of geography teachers and teachers that we interview for the course here and that are on the course here describe this love of field work and really warmly remember being in the field and engaging with the world. And some teachers really deeply like invest their identity around that. So some previous research that I was doing with geography teachers, this really interesting example of a teacher describing why they'd chosen to do geography. And so this teacher described sitting in an English class at A-level, and they were talking about this poem by Keats and the ways in which they're prompted to

ask these questions about why did Keats write this and what's like behind this. And they said, look, I was sitting there and I just thought, How do we know? How do we possibly know? Maybe needed to make some money and just sort of bang out another poem and then there's no deep meaning. And then they were on a geography field trip the next week and they were standing on top of this drumlin, this kind of landform that you get in a glaciated environment. And I said, they just remember standing there and they were like stamping on it being like, this is a drumlin, like I can see it, I can like feel it, I can touch it. This is how you know stuff, this is knowledge. And right, that's it, I'm going to do geography and then get a geography degree and then took it in a school for 30 years by this point, but still find themselves as a physical geographer. So that's my expertise and that's where the subject comes from. It's this. And so you get this really strong affiliation with one part of the subject and these beliefs about where knowledge comes from and the role of experience and so on. For many, it seems to be quite drawn to this idea of things that you can see and touch and so on.

Heather Sherkunov

And that's exciting, right? I mean, it's so interesting listening to you because I'm I'm getting on, I'm getting very old, and when I was at school in geography, it was a little bit boring. And there wasn't, frankly, the connection to the outside world. As ridiculous as that sounds, it was very textbook, it was very... It's just very sad. And that's so much more interesting to be able to link it so much to physical experiences outside of the classroom.

Steve Puttick

Yeah, there's a famous quote from Joseph Conrad, I say famous, famous like geography, but a famous quote from Joseph Conrad. So he wrote like Heart of Darkness and various other things. And yeah, he talked about the ways in which his geography professors were incredibly boring and he said that not only did they look old, but they looked as if they'd never been young. And he talks about the way in which they didn't have that kind of like blood pulsing through them. And I mean, that example with Joseph Conrad, there's loads of really deeply problematic stuff with his book, Heart of Darkness, and various other things about the ways in which he engages with geography. But there is such a clear kind of statement of this kind of idea of geography being about what he calls wide open spaces and about blood crossing through your blood veins and all the rest of it.

Heather Sherkunov

I'm curious where you grew up and if there was a particular experience that sort of shaped your relationship with the environment when you were younger.

Steve Puttick

So I grew up in Guildford, so just southwest of London, and I always liked geography. And it was always a subject, I don't know, I always just assumed that I would do geography and that I would, if I could go to university to do geography and carry on with it. And it was always about that idea of the mountains and so on. So I remember we had to do a GCSE project and I remember doing it. There's some... rock climbing around Tunbridge Wells and East Grinstead and these sandstone outcrops. And there's always a big problem with erosion because it's quite a soft rock. And so the ways in which you set up anchor points at the top, they have these kind of fixed points and there's real sensitivity about how far you extend your ropes. There's no moving ropes against the rock and this kind of stuff, the way it makes the footpaths monitored and developed and whatever, it's always been like a big issue. So I remember doing the project on that and researching that and thinking about the ways in which that research could then help us to form ideas about management, which I think was, for me, really fascinating to think about something that was completely what I was doing, like in that kind of everyday world. and then apply this extra level of rigour to the way in which you thought about it and analysed it and so on. So that was significant. But in terms of thinking more broadly about the environment, then just some of those experiences being put away in the mountains and some of those awesome things you see, whether that's an amazing sun rays or being in a particular space and just that sense of scale. I remember being in the Lake Street and seeing one of these cloud inversions and so the cloud's kind of lower than you in your body. And just kind of being blown away by lots of that.

Heather Sherkunov

Were those experiences with school or with family?

Steve Puttick

So some of those experiences were with scouts, that I did a bit of stuff with scouts and they'd taken us climbing. And then there was a local climbing wall that Surrey University had near us. And so I remember being, you had to be 16 to go and climb the wall. And I wasn't 16. I remember me. kind of some kind of forgery so they would let me in and so I could go and climb there and then on my own and then meeting other people there and then there was a group that was like loosely associated with Scouts, they call themselves like Surrey Scout and Glide Mountaineering Club and there was a group of people from there who would then go from various places across Surrey on a Friday night after they'd finished work and drive miles and miles and miles and end up in these little campsites in like North Wales and the Lake District and stuff by like midnight 1am and then camp somewhere and then have a couple of days away climbing and then come back like shattered Sunday night. And so that was a part of like these big drives up from there to get into somewhere where there's hills.

Heather Sherkunov

So if there are any under 16 listeners, we don't condone forging. 100% way in to get on climbing for a wall. And so you don't remember wanting to do anything else when you were little. It was always just geography or the outside world in some way.

Steve Puttick

Yeah, no, it was always just, I thought I'd probably do geography. I remember having a conversation with a kind of careers person when I was thinking about A-level choices. And at that point was thinking that there was, I don't know, there was, I don't know whether we'd had something or someone had mentioned something. But there was a part of that time when I thought, maybe law seems like a good idea. And so someone says something about law. And so I remember talking to them about these kind of available choices. And they were like, well, don't do PE because I was going to do PE. And they said, you should do physics instead. And so that's been the worst career advice I ever got because then I did this and then did awfully and got E in my physics A level. And yeah, maybe it should make a different decision. But after that little flirt with law, then I was always, and before then as well, geography. I remember we did a field trip to Iceland as part of the A-level course. And again, that experience of being in these just amazing environments and some of the work that we're doing there and the ways in which the particular volcanic environments and land that's really recently being kind of created through that being, again, something that was just incredible to see. And I thought, I really want to kind of understand and be in these places more.

Heather Sherkunov

And did you have any role models who worked in education?

Steve Puttick

No, I didn't really have any. I'm definitely not from a family of late teachers and stuff. And in terms of like getting into teaching, I'd always said that I wouldn't be a teacher. And I did quite a bit of climbing, instructing and stuff. And then obviously did geography and people would say, oh, are you going to be a geography teacher? And I'd say, no, absolutely not. And then it was like a relatively last minute decision that I applied actually to this department to do a PGCE course. and thought, it'll probably be quite hard where everyone says it's really busy, but it can't be that hard really, can it? Because loads of people are teachers. And honestly, I've never underestimated anything more in my whole life. There's people a number of times that... intellectual not only challenge but excitement of it just completely blew me away and I remember being just completely in awe at the ways in which people are engaging young people with this huge active thing and discipline of geography and doing it in ways that were just so fascinating and the amazing complexity of teaching and the challenge and particularly that intellectual challenge of it as well as just the huge privilege that it is to be a part of young people's kind of development and so on. So yeah within a couple of weeks of that

course. It's so obvious how much I'd underestimated it. But kind of just also just how incredible it was.

Heather Sherkunov

You went off and you were a geography teacher and you've come back into academia. And I'm curious what that transition's been like.

Steve Puttick

Yeah, so I was geography teacher and then head of department. And whilst I was head of department, I did an MA at Warwick University. So that was evenings getting the train from Banbury to Coventry and going to various sessions and lectures and someone else's and then a bit of weekend stuff on a model that's the similarities with our kind of MLT course that we've got. And I'm so old and it was so long ago that the MLT didn't exist at that point. It was just before everything started. And through that, it was then kind of part-time two-year masters. And I just really loved doing more research, making time to engage with the literature, think about how it's worked out in my classroom, and being engaged in that writing process. And I thought, I really want to do some more of this. And they said, oh, you should do our EdD, the professional doctorate, and I just thought there's no way that I can do another eight years of part-time having full-time teaching load and headed department responsibilities and doing the doctorate a long time. Many people do that in education and it's incredible that they do that, but I felt so pulled in those different directions. I thought, I don't know. And then ended up getting ESRC funding to come back to this department and so did the MSc and DPhil there. And yeah, it was a huge kind of opportunity and that was amazing to do that. At the beginning of that, I thought, this amazing and incredible opportunity. It's maybe time to move schools. I'll look for a different school after this and either it's kind of head of geography or assistant head, deputy head type role. And then through doing that MSc in DPhil, I just then got more and more sucked into doing that research. I taught a little bit on the PGC course and thought, oh, this is incredible. I'd love to do more of this and really kind of be able to devote more time to that research and teaching in a higher education context. I didn't really understand the whole early career job market. And so that was definitely a shock when I'd finished. I thought that having more qualifications, it would be easier to get a job. But the kind of early career market is interesting. And ended up getting a job at Bishop West Chester University, which is a small university. It was about 2,000 students, so the size of a kind of secondary school. And a job came up there and I kind of seen an actual role. And so finishing the DPhil, I needed a job. I then went there and ended up staying there for five years and had an amazing time and many kind of really interesting collaborations. And there was a brilliant project that a colleague Professor Chris Atkin, sadly no longer with us, but had come from Nottingham and was engaged in this project, this Newton-funded project on the Smart Cities Mission in India. And so he was leading community and education, stranded that,

and I got really deeply involved in that project. And it was amazing in many different ways, and it was shortlisted for the Newton Prize for Impact in India. It was the only social science project that year to get shortlisted. And it was, yeah, an amazing, like really formative experience. And then 6 1/2 years ago, the job came up here, this associate professorship in teacher education. And so, I applied and very thankful to be sitting here.

Heather Sherkunov

We've actually not touched on your Gujarati navigator research. Do you want to give a quick overview of that? Because that's really interesting.

Steve Puttick

Yeah, so that's actually the project that I kind of like alluded to when I mentioned working on a project that was funded by the British Academy. That's exactly that project. So that's the Gujarati Navigator project. And I mean, in many ways, kind of came out of this incredible environment that we've got here at Oxford. So part of the inspiration for it came from a research lunch in my college. I'm a fellow at St Anne's. Again, I'm pointing down the road, just down the end of Norham Gardens where we are here. And a colleague from that works on kind of Portuguese was doing a presentation. So Professor Simon Park was doing a presentation about his book, *Wreckers*, and it's brilliant books. It's out in Penguin now. But as part of that, he made a throwaway comment about Vasco da Gama's journey to India. And this throwaway comment was about the role that a local navigator, this Gujarati navigator, had played in it. And it just then opened up this whole like angle of inquiry for me because the stories that get told about geography is often from an individual lone European guy doing some kind of exploration and then that being this like really influential thing. And so there's a classic book about geography called *The Geographical Tradition* by Livingstone and he talks about the ways in which Vasco da Gama's stunning expertise in navigation and his stunning navigational knowledge enabled him to make this journey. And what was then fascinating was then I was getting into the ship's logs and getting into other literature around it and some of the other earlier accounts and it becomes really obvious that it wasn't Masco de Gamma's navigation at all, but it was these local people. And so after they rounded the Cape, renamed then as the Cape of Good Hope, and then leapfrogged their way up that African coast, then they're doing a few different things. Everyone's always hungry, so they need more food, they need people to be healed, they need to get some more kind of energy resources and so on. And they always love building like some kind of thing, like putting a cross in or making some kind of post that they say they've been there. They would kind of like call the place a different name, whatever. But then they'd also get a navigator and they'd always need someone. Can you take us to the next part? And so they always get a local navigator. And it happened that when they were in Malindi on the Kenyan coast, it's now the Kenyan coast, it's the Gujarati guy.

And so it's this Indian guy who's done this journey loads and is an expert navigator. And they get this Gujarati guy and he's the one that then leads them and navigates that now kind of really famous journey from Malindi on the Kenyan coast over to Calicut on the Indian coast. And so the kind of implications for how we think about knowledge, how we think about that kind of expertise, the ways in which we praise particular people and make certain people visible and make other people invisible, it just has so many kind of implications for all of that. I became really interested in that and in that story and in what maybe other archival evidence could tell us about the role that global navigators have played in these different journeys.

Heather Sherkunov

Yeah, fascinating. All of that rich narrative and storytelling and it just makes geography so much more, doesn't it? And it makes it so exciting. Like it's quite Indiana Jonesy, which I think is the best thing it can possibly be. How can teachers translate that excitement and the storytelling of the narrative into what perhaps could be a very set curriculum?

Steve Puttick

So in my recent book, *The Geography Teaching Adventure*, there's a few chapters that I particularly think about this idea of storytelling. And so I think the idea of narrative, the ways in which storytelling is such a powerful tool to use not only kind of individual things in classrooms, but more broadly thinking across the subject. And I think attention to storytelling is just so key. And so in that book, I think about the ways in which make an argument for telling more stories and for telling better stories as well. So thinking about the ways in which the kind of logic of narrative and the shape of it, the ways in which it really gets us to think about kind of particular characters and the way that those characters function, the ways in which the idea of like a tension or a point of tension, creating this need to know so that at the start of a film or a book or whatever, they often have an amazing ability to really kind of hook us in and then to create this desire. Like you want to know what happened, you want to know how this is resolved or there's some other tension, that means that you're really bought into that. And I think there's a huge amount that we can use for teaching based on that. So yeah, I think that I would recommend those, particularly those couple of chapters on that. But yeah, other work that we're working on now to try and think, what stories can we help geography teachers to be aware of? So in terms of the development of particular theories, the stories that we tell about particular geographers, Many times these things pop out of thin air into a textbook or into a resource and we get a model of something or a theory of something, a concept or a claim or whatever. And it's as if they've had no cost and say like who created them, where they created them, what kind of context is that in and what are the implications of that. I think there's huge potential to do some really

exciting things and say telling more stories and telling better stories, I think it's a huge thing that we're working on and that, yeah, I'd really encourage you all to do.

Heather Sherkunov

And where can people get hold of your book? Online booksellers, all good bookshops.

Steve Puttick

Yeah, all good bookshops. And in Korea. So it was recently translated into Korean. So you have colleagues in Korea?

Heather Sherkunov

If you could redesign geography education in the UK and you could do anything you wanted, where would you start?

Steve Puttick

Yeah, well, I've asked a question. I think, so And as I was if you think through kind of answering that, I'm really torn between like the kind of practical constraints that we've got for teachers kind of now. And so I'd want there to be huge structural changes. So increasing resource so that teachers have got more time, increasing funding so that teachers are able to, where they want to do more different study and engage in their subject further, that there's more scope for that. So I think that equipping teachers and resourcing teachers would be a massive part of my answer to that question. I think rethinking the ways in which the assessment system works, the way in which particular kinds of knowledges are rewarded and others less, so would be a huge part of that rethinking. And at the heart of that, connection with the academic discipline, so thinking how can that relationship be something that's really generative and is really stimulating are the works that colleagues work in discipline are really feeding into and what's happening in schools, that school teachers are really feeding into those academics ideas, the discipline, and that relationship is two-way and really active. We said about being out and about and being in different places and stuff. I think that there are many amazing developments that have made in terms of technology and what we can experience and see through screens in classrooms is just incredible compared to really recent past. But it is different and that mediated experience is different from a physical embodied experience in different spaces. And so making really good time and space and again resource to be in different places and particularly where students from backgrounds where they've not been able to get in some of those spaces for whatever different reason, enabling that so that their understanding and experience of the world is that bit bigger.

Heather Sherkunov

And do you think that the sort of the pressure on teachers is one of the biggest challenges that education as a sector faces currently?

Steve Puttick

Yeah, I mean, I think teachers feel that pressure in different ways. And certainly as head of geography, I experience far less pressure than my colleagues who are maths teachers or head of maths. and the kinds of things that parents would come in and say to them would definitely be quite different to the things that they would say to me, both in terms of that real excitement and love for what's going on, that they would get a bit less of that, but also in terms of the pressure that the need to get a certain maths GCSE, say, is quite different to the need to get a geography GCSE. So there's a huge, vibrant tutoring market in maths and people paying lots of money to do these things. There's not really a demand for geography teachers. to do that kind of tutoring work. And so that kind of just, the investment in those areas, I think it reveals the bigger pattern of the kind of importance people place on subjects and that idea of pressure. I think the pressure that teachers face in terms of time is such a key one. And so making time so that people are able to read, to engage with these debates, resources and so on. And that for me is where the pressure is really felt for all teachers and particularly in a geography context.

Heather Sherkunov

What have been the biggest highlights of your career so far, do you think?

Steve Puttick

I think, I mean, I mentioned kind of feeling very grateful for sitting here with you, and I think that, so Professor Darren Baird was the head of department here when I was offered the job here, and I think that going back to Lincoln and having kind of messaged and speaking to her on the phone and being offered this joy that would be kind of a massive highlight of my career that the department's played such an important role in terms of that really formative experience. of coming into teaching, and I described the ways in which we came across that and underestimated it, and then really transformative, and then coming back to the MSC and the DPhil, and then coming back in this role, the departments play just a huge role kind of in all of that, and so they become of big moments, I think, in terms of career stuff. I mentioned the project working on Smart Cities Mission in India, and I mentioned the colleague Chris Atkin, and Michelle, who was at Nottingham, then Michelle Clark, who led that project, again, was just a huge part of that. So she's a geographer and was really engaged in these really kind of interdisciplinary conversations. And yeah, I'm kind of hugely grateful for Chris to introduce me to her and then kind of what I learned from her about the nature of those kinds of projects and academic work more broadly. Yeah, would be like a huge part of that.

Heather Sherkunov

And what's next? Do you know?

Steve Puttick

What's next? There's a. A kind of book on that idea of narrative I'm working on, so thinking about the ways in which geography teachers can use narratives as a whole idea of storytelling. I'm working on a kind of a book that does more on that. So he thinks at a range of different scales, how can geography teachers use these ideas from narrative? And then working on particular stories, so particular geographers and their kind of story, particular theories and concepts and the kind of stories behind them that then might bring students into a richer understanding on that. And there's lots in the Net Zero Ed project that has stimulated further lines of inquiry. So there's been some really interesting insights through the empirical work that we've been doing in classrooms and others that we're really keen to scale up internationally. So we've got much more international comparative data and understanding of that. And then the next iteration of the curriculum here, but also internationally. And it feels like whatever direction that takes, there's going to be a huge amount to do in terms of how can we make sure that connection between the ranger disciplines and what's happening in schools is really active. And so building on those disciplinary networks and doing more of that work is a key part of that as well.

Heather Sherkunov

Lots of exciting things to come. We've run out of time. Thank you so much for being here, Steve. It's been an absolute pleasure speaking with you today.

Steve Puttick

Thanks very much for having me.

Heather Sherkunov

You can find out more about Steve's work and our department on our website, education.ox.ac.uk. Join us next time for the final episode in series one of Education Explored, the Department of Education at the University of Oxford podcast.