

Welcome to Turning Conscience Into Action, the Earth Charter podcast. Join Mirian Vilela, Earth Charter International Executive Director, in her fascinating conversations with great thinkers, scholars and activists from around the world who are working in the fields of sustainability, ethics, education and social transformation. Our purpose is to generate new insights on how to face current global challenges and inspire informed action.

Okay, so today I am having the pleasure of welcoming Stephen Sterling that is here with us and thank you so much Stephen for joining us today and be willing to share so much of your knowledge and wisdom with us.

Thank you. So Stephen, in brief, what is your own take on education for current times? What do we need to rethink in terms of education and learning for a more sustainable world? And also how does it relate to transformative learning and ESD? Okay, so... Hello, everyone. So the only words which worry me there is in brief, but I'll do my best because it's such a big topic. I want to just conceptualise it a little bit because I've been working on this issue for something like 40 years. I came in on it on the occasion of the UN conference on the human environment in 1972 and ever since then, my question to myself and everybody else is what is the role of education in relation to what has then seen as environmental issues but now more broadly sustainability issues and now even the future of the planet and so on.

So these are extraordinarily important issues and topics and I've been working on it for a very long time and it's a very connotation because more and more people are, even people outside this working area, are beginning to ask questions about what education is for as they are in other sectors of human endeavour. So I think the most important question is that one, what is education for, particularly in the context of the multiple crises we find? If education is one of the key influences on society, if we agree on that, then it needs to respond fully and openly to the contextual crises that society is facing and I think it will be more and more apparent if you look at social media and the news and so on.

But another aspect of this is if education has been going on for years and years and years, how come it isn't doing a better job? So I think the other aspect is the policy and practice which is perhaps contributed to the crises we are facing because it is argued that a lot of mainstream education actually feeds unsustainabilities through uncritically reproducing norms and competition and only looking at cognitive thinking and so on, rewarding conformity and not really encouraging young people to be critical thinkers. So my argument really is that we are living through volatile and threatened times and education really has to step up to the plate if you like, step up to the challenge.

So I have been talking about rethinking education for 20, 30 years and I think it is much more than adding a few environmental or sustainability issues or ideas to the curriculum. It is more if you look at it deeply about rethinking the purpose of education in a certain world. In the last 10 years or so there has been a lot of discussion about transformative education and transformative learning but I have always argued along with other people that education cannot be transformative in effect unless education itself, that is educational thinkers, policymakers and teachers, go through some kind of transformative experience themselves, some kind of awakening.

So it can happen. Which allows them to be education and you. Sorry? So transformative education can happen but unless it can only happen if policymakers go through a transformative experience. Those involved in education, either shaping policy or delivering it, needs to think themselves critically about whether education is doing a sufficient job in the context of current realities and I think that is quite a loud question that is being asked now. It is actually very surprising that many policies around, in conventions around sustainability hasn't really looked very seriously on the role of education as a driver for social change.

That is almost traditional. I think the problem, I wrote a paper for UNESCO some years ago and I said that sadly the reality is that a lot of sustainable development doesn't take account of the role of education and a lot of education doesn't take much account of sustainable development. So it is a double-edged problem. I think we are getting through that but there is an urgency to all this. So I am kind of encouraged on the one hand and want things to speed up on the other if you like. What is transformative education for you?

So again it is quite hard to reply to this quickly but I make a distinction between education about sustainability which is really content-led, education for sustainability which is really where teachers and pupils or students start asking deeper questions about the values which are affecting unsustainable or sustainable patterns. So it is questioning a bit of an advice if you like. And then there is a third stage which myself and others call education about sustainability which is an ongoing experiential learning situation because of these issues being so complex and so rapidly changing. We need to be learning and re-learning all the time. The old model of there is the body of knowledge. All you need to do is transmit it and kids learn it. It is really not appropriate.

So transformative is really pretty much what it says. So it is seeing the world in a new light. And those who have known my work will know that I mean by that is seeing it in a much more connective and systemic and holistic way than is the way in conventional education. So you mentioned education about sustainability, education for sustainability and the last one is?

As sustainability which means it is an ongoing explorative experiential exercise which is hard to do. Not many institutions have managed that. I refer to Schemach College which just happens to be down the road from where I live where this kind of work goes on all the time. But within a conventional institution it is hard to do because it actually goes against the structures that most institutions follow. But having said that, I was a teacher for years and I think you can do little, what might I call it, like little sparks of transformation if you like where you see a kid's eyes light up and go, oh, I never thought of that before.

That's a moment of transformation if you like. So even though I talk about whole scale system change, you can do little stuff in the classroom, in the lecture theatre where you are opening people's eyes to different ways of thinking and being and seeing. So could a teacher or an institution, an educational institution work in these three levels at the same time or like education about sustainability? Sure. So some people think when I say this that you have to jump to this transformational level. Well, that's probably not possible on an institutional basis. So if you can start with education about sustainability, so at least

you have sort of content led beginnings if you like. That's a good start. I wouldn't argue with that. So you can see these are stepping stones if you like.

I like the idea of seeing these three levels as stepping stones. So let's talk a little bit more about ESD, education for sustainability, education for sustainable development. What is that for you? Okay. So, well, I don't know if this is a good thing or a bad thing, but I just happen to be one of the first people to use the term education for sustainable development. I remember doing so at a conference in New Zealand 30 years ago, and it came after the Earth Summit held in Rio in 1992, when the idea of sustainable development really came to the fore internationally on the back of the Brundtland report in 1987. So what was missing in the debate then was, as we just mentioned, Miriam, not much recognition of the potential of education to make a positive difference towards a more sustainable future.

So this idea of education for sustainable development arose at that time, maybe 30 years ago, and I think it's really, I've been surprised ever since how much it's achieved prominence internationally since. And I think UNESCO should take quite a lot of credit for that for the work it's done over the years. But I think if you look at it historically, I think ESD didn't emerge in a vacuum, but really derives from, well, I would say two things. Firstly, the sort of liberal and progressive education tradition, which emphasizes the potential of the learner and learner-centered education. And the second thing was all the education for change movements, which arose in the 1970s, 1980s, and so on, which emphasized the role of the learner in understanding and shaping the world.

So I think they're the roots, if you like, of ESD.

And it's emerged quite strongly over the years, but it's, I think, the exciting thing about it, but also the break on it, if you like, is it runs counter to the traditions of conventional education, which tends to be reductionist and subject-based, So that's the convention, that's the mainstream largely.

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And then ESD tends to be more expansive and experiential and open-ended, which is why it often has a hard time in conventional settings and institutions. But in terms of the characteristics, I would just sort of echo pretty much what most people are now saying, that it addresses values, it's holistic in approach, it's interdisciplinary, sometimes transdisciplinary, participative in its regards, futures, pedagogies. It's futures-oriented, it's locally and globally aware and relevant, it asks ethical questions, it works with real issues and so on.

And from my point of view, standing back, I think all these characteristics are philosophically, are consistent with each other. I can give you my quote, if you like, my definition, which I've used before in my writing. So I've written before that ESD is about the kinds of education, teaching and learning that are required if we are concerned about ensuring social, economic and ecological well-being now and into the future in conditions of uncertainty, complexity and risk.

But I'd also add that a lot of people, for their own reasons and maybe good reasons, don't like the term ESD, and I'm fine with that. So the idea of wellbeing has come to the fore recently.

And to be honest, I don't really care what people call it, as long as the values, which underpin educational policy and practice are about caring and nurturing and working together to try to ensure a safe and healthy future, futures for all.

And that's why I would say, that's why the Earth Charter is so relevant, because it helps us do this work.

So you are not so attached to a term, but what it happens actually in practice. It's another one of these sort of double-edged problems really, because if you call it ESD, as many doing UNESCO does, that's great because it communicates. People say, well, what's that mean? And so you say what it means.

But if people don't like it, they don't recognize it, they might think, well, I think my education work is pretty good. You're saying it's not ESD, therefore it doesn't count. So I try to be inclusive, you know, so people don't like ESD and they've got another term, which is informed by similar values, that's fine, that's fine.

So let's not, let's not exclude people by using a term which they don't recognize. I think that's my argument, really.

How do you relate ESD with quality of education? Because I've been to some countries here in Central America, in Latin America, and when we try to promote policies on ESD, we find many walls from a policy-making point of view, because countries have many other challenges and priorities. One of them, they say, well, we are here concerned with the improvement of the quality of our education system. And I try to argue that ESD could help, but what is your take on that, on how to link ESD with quality education?

The quality education? Well, yeah, okay, so I think the sustainable development goal number four kind of helps us on that one, because as you know, goal number four is called quality education, but in there is ESD. It is wrapped up in the description there. So hopefully everybody looking at that will think, hang on, quality education and ESD, they seem to be related as far as UNESCO goes and the United Nations family of organizations go.

And that's a good thing. So, you know, I've got no argument of quality education, because, I mean, everybody wants their child to, let's say, to experience education, which is of good quality. And that's great. I think my reservation is when quality education is equated with practices of quality assurance. And quality assurance tends to be very, can be quite judgmental and limiting depending on who decides what the criteria for quality are.

You know, that's a sticky issue, if you like. And it worries me a little bit because it can tie things down and not allow the free flow of ideas and creativity and imagination, which I think we need in education. And I think is the hallmark of quality learning. Actually, you know, if you see kids who are motivated and excited and curious like little kids are, little

kids are just like that. That's what, in a way, that's the kind of style, kind of feeling we need in sustainability education. And I think that is good education.

So, you know, quality education, yes, but not if it actually constrains innovation and experimentation and creativity and imagination and so on.

Yeah, I mean, good education is an education that engages the learner, you know, that offers participatory spaces for them to engage and use their creativity. And that's also in the heart of ESD.

Yeah, so I think, you know, I agree that, however you argue this, you have to convince policy makers that this approach will actually increase the quality of their education, and it will lead to, because it's relevant. And, you know, I mean, I might say later, one of the questions I know is coming up, you know, I think the pressure for change is coming from below, and students want schools and universities to really respond to these issues, and I think that pressure is going to grow. So policy makers need to take account of that quickly.

So, Steve, you have written so much about system thinking. I actually have used quite a lot of your writings, your articles and books and chapters in my own teaching here for the past, I think, over 10 years. So, your thoughts are actually very much present in our classrooms here in Costa Rica.

Let's talk a little bit about your thoughts on system thinking. What does that mean? And what's the implications of system thinking to sustainability and to ESD?

Something so, so system thinking. So, yes, I've always been interested in this. And it's going back to the thing I said just now about how young children learn, you know, I think in a way, and I'm not the only person who said this, that, you know, young children, in a sense, are systems thinkers, in the sense that they learn by making relationships, you know?

And we tend to, through secondary education in particular, tend to knock that ability out of them. And systems thinking is not really recognizing the secondary curriculum in most countries, I don't think. A few years ago, I was asked to write a school resource back by WWF Scotland to introduce system thinking, and we called it Linking Thinking, and you can still find a link to that on the internet on my website. It's very useful.

Yeah, good. It's very useful to the point.

And my attempt there was to de-mystify system thinking, because you know, if you say that people say, oh my goodness, that sounds far too difficult and technical for me.

And I tried to de-mystify it really, because you don't have to do a three-year degree in systems thinking to really get the idea.

But in the linking thinking materials, I make a distinction between two types of thinking. Like one is one I call box thinking as a metaphor, because it's like a box and it's contained and it's a bit rigid and it's thinking within boundaries. And the other type of thinking is more like a web, recognizing interconnections and it's flexible. And put simply, box

thinking is pretty much how most people in the Western world you think. But web thinking is connective. It tends to be, well, in history, it's been typically by indigenous cultures, which are much more holistic in the way they see the world.

And it's important because, you know, it's been said by many people everything, everything connects. Everything connects to everything else. So nothing exists in isolation. And I mean, associated with those two ways of thinking. So, you know, box thinking, which is linked to reductionist thinking, understandable by breaking it down into parts, which is fine. And it works quite well in fact, quickly in engineering and so on. But the other way is to go the other way. Instead of breaking into parts, it's looking at relationships and holes and trying to understand phenomena through the relationships involved.

Now the question is how does this relate to that? And that's pretty much what systems thinking is. It's necessary for working with people and working with living systems to understand them because they're unpredictable. We need to understand connections and relationships rather than discrete events and discrete phenomena, which is better addressed through the reductionist method. So these two methods sit side by side, if you like, but the world is so influential. So the two methods, you mean box thinking and system thinking?

Yeah, web thinking. Web, like a web. So systems think the metaphor is a web. Reductionist thinking the metaphor is like a box, if you like. So the two methods is box thinking and web thinking are working together in a classroom environment? Much more holistic. Much more holistic. Looking at, you know, like a web, it's looking at it into connections and that's pretty much what systems thinking does. So there's box thinking, but I'm saying, usually that's a metaphor that we tend to think in boxes.

So for example, you know, subjects can be seen as boxes and people don't stray outside their subjects. But and departing in a way that scores the universities are organizing departments and silos and so on. So this is what I mean by boxes and we need to get to a more holistic and interdisciplinary view. So you need to cross these boundaries and look at connections because the world itself is highly interconnected. Sure. So if I'm a language teacher in a high school, can I do system thinking when I teach language or history?

Yeah, probably. I mean, if you're looking at, if you're looking at a history, you know, it's systems thinking is understanding and not just cause and effect, but also consequences. So if you look at events in history where one thing led to another, which led to another, which led to another, that's, you know, you can under that understand that from a systems point of view. Whatever it is, I mean, you know, I mean the causes of the First World War, I mean, something like that, you know, the very, very small, very small causes led to a huge, you know, European explosion of war.

So people use systems thinking to try and understand complex interrelationships, but, but I think you can do it, you know, quite simply in the, the linking thinking material show a way of doing that. I think, I mean, the key thing here is that, you know, this gets a little bit philosophical. I'll try not to, but the key, a key way of seeing the world in the Western world view is this idea of separation from nature and separation from each other. And

systems thinking supports a more, what I call a participatory world of view where all our actions have consequences and where we are more adaptable and flexible and creative.

So, so, you know, and if we see ourselves interrelate as interrelated with each other and with the world, then we're much more likely to care and love and feel responsible for our actions and our future. And this is a participatory world view, but it's, you know, you can lead towards it through systems, systems approaches without getting, without getting too technical. Sure. And system thinking is crucial and essential to understand and apply sustainability in everything we do, right? So I was out of question.

No, it was a comment. Okay, so I didn't quite, yeah, okay, good. Can you, can you talk a bit, is there any difference between the concept of system thinking and complexity? What's the relationship? System thinking, complexity. I'm asking this because there are some authors that are advocating for complexity in education, others are advocating for system thinking in education. Are there any similarities or differences or is this the same? Well, I think for the purposes of, you know, the purposes of the people who may want to listen to this, I wouldn't, I wouldn't worry about it.

You know, people in the systems field do make a distinction between systems thinking complexity is partly based on the history of these, of these movements. And, you know, for example, there's not one, there's not one type of systems thinking there's several and I don't want to commit to into the detail of that. And people coming out of the complexity science were from a different background from people involved in systems, science and systems thinking so you have different fields if you like.

And systems thinking tends to be, tends to be associated with, with problem solving or can be, you know, looking at the situation and trying to improve it complexity seems to be, is much more, complexity science is much more about trying to understand the relationships within a complex whole rather than trying to, trying to change those relationships if you like. But, you know, for our purposes, I don't think it, I don't think we need to get into that too, too deeply.

You know, complexity systems, holistic and ecological thinking, I, these things all kind of relate if you like. And I mean, my main task for years is just to try to get people to think outside their, their boxes if you like to see relationships and that's, that's good enough for me. Yeah, it's wonderful. Okay, thank you. Now UNESCO has embarked in a new process or initiative around the futures of education. And I'd like to have your take on, on what is your, what's your vision, what do you envision for the future of education in terms of your wish and the reality that you see that may emerge.

What is your, what do you think is this major changes in education practice that are inevitable. That's a really big question. And it's important question. I mean everything, everything is in flux as we know in wider society. And, you know, even in the last year that I think was encouraging signs of rethinking in, in education. There's more talk now than ever before of the idea of repurposing repurposing education, which I think is key because if you, if you change the purpose or aim of an organization and everything else in terms of policy and practice begins to change and this is following, you know, in the very well known systems thinker, Danel Meadows, who came up with these ideas. And

so, so the idea of repurposing in line with what seems to be happening internationally and globally is important.

So, you know, ideally you ask me ideally, then I think, you know, if education is fully aligned to the hope and possibility of a secure, safe and sustainable future, which reduces environmental, environmental impact and help work us with help help us work within planetary limits and help us build local resilience and well being that would be great. And now in terms of what's happening, I know there's a lot of work on competences, sustainability and competences which I've been involved in a little bit and I see the EOE, OECD has produced a learning compass which advocates its approach and champions well being, which is all good, but I think we need to at the same time as sort of reinventing things, I think we need to also have a mind or an eye to critiquing of what's part of the problem already.

And I think this is where I know UNESCO is bound by politics to some extent, UNESCO tends to fall down and possibly the OECD too because they don't necessarily critique what the inadequacies are. They just want to add a new idea on top of, on top which could be like building an eco house on poor foundations if you like. So part of my work has always been trying to critique, you know, what's wrong in order to come up with something which is more adequate.

I think in terms of, and if you take the COVID virus, I do want to mention that because I think that's leading to questions about the effects of rampant globalization and I think because of this pandemic and possibly other ones down the line and climate crisis, as well as limits to resources, I think we're going to see a move towards localization, socially and economically and maybe, maybe we need educational sustainable contraction rather than sustainable development, you know, I think this is a, you know, we can't keep increasing everything because all the hockey and sports development and pollution always go up and up and up and we need to rethink stuff quite, quite fundamentally and there's lots of books and reports coming out about this so, you know, ESD,

Whatever form needs to do better than support a business as usual scenario which takes us down to a disastrous path really.

I mean the other big trend of course is digitization of learning which has advantages as we know through the, even now, you know, using this medium now, right now, but also disadvantages if it means that people are going to meet and exchange and laugh and hug and have fun together, much less.

But also, you know, digital learning is touted as being the answer to educational provision but it has no intrinsic relation to questions concerning content and ethics which continue to be critical so, you know, I hope that the vision of a more humane and just insecure world will inform educational thinking into the future but I mean there's so many unknown questions about how the world's going to be in 10, 20, 30, 40 years and I think being flexible and adaptable within educational systems has to be, has to be key rather than setting things in stone.

Yeah, the idea of being flexible and adaptable is very important in a good one. But in terms of what is your ideal desired scenario for education in the next 10 to 20 years?

Well, I think going on what I've just said, I think because of these huge issues, you know, climate crisis being particularly biting or being too biting and international politics falling apart really with competition between China and the US and the rest of it, I think and resource problems and pollution problems, I think we will move towards localization anyway so, you know, whether we like it or not, now if we do it in a designed way, in a thoughtful way, in a considered way, we can rebuild and regenerate communities and more local economic cycles which is a healthy thing to do, you know, so, so I think building resilient healthy communities at a local level with using digital means for international and global communication but actually a lot of, you know, a lot of healthy relationships, economically,

Socially, environmental, and being regenerated at a local level is key for me and sort of re-skilling people and building community is my preferred scenario if you like. But if you look at people's, you know, a lot of what's been done on people's preferred futures and lots of different groups, whether they're school, children or businessmen tend to their preferred futures are green, sort of localized future funnily enough so a lot of people have a similar idea about what constitutes a preferred future so I think with some luck we might move towards that hopefully.

And the big agencies like UNESCO, the Sustainable Development Solutions Network and OECD and so on hopefully will push that kind of reform rather than increasing globalized kind of testing culture which I really have some questions about. The idea of going more local in terms of education doesn't go against the idea of planetary citizenship or Earth's community. No, I don't think it does. It may on the face of it sound like it's a contradiction but I don't think at all. That's the case. A lot of work has been done on global citizenship which means having an eye to the future, having an eye to the well-being of other people and distant people.

I think you can actually form solidarity with others and having a concern for poverty and migration and these issues from the place you are. I really do and I think what globalization has tended to do, maybe unwittingly, is to tend to rip up the self-reliance and resilience of local communities, whether it's economically or socially. And cause all kinds of migrations, which I think is really unstable. So I think a sort of thoughtful relocation of economic patterns and social patterns would be desirable.

Because not least, we can't afford a huge carbon cost of material, endless materials being shipped around the world and millions of people flying all over the shop. It's just practical. I think it's the nine planetary limits which were set up by the Stockholm Resilience Center some years ago and now are being realized. And I think we've transgressed three planetary limits now and others are in danger of being transgressed. So we need to contract some of our material expansion and actually put more effort into quality of life rather than quantity.

Quality of life rather than quantity. That's a good one. I just imagine that I am a teacher, could be from a secondary school teacher or professor of a university. I know nothing

about ESD, a little bit about sustainability. So I have two questions for you in that context. How would you convince me to embrace the idea of ESD in an easy way in my own context of teaching? Would you convince me to embrace that idea and actually apply ESD in my teaching? And what would be your advice or your most important advice for anyone willing to make teaching and learning for sustainability happen in their educational context?

Yeah. So I think the best way to answer this is to refer to something I was involved in a few years ago. So we have in the UK an organization which links the universities and I've been working in the university sector for some some long time and it's changed its name now but it was called the Higher Education Academy. And they asked me to write a guide for academics who know nothing or little about ESD rather than those who do. So it's called the Future Fit Framework, an introductory guide to teaching and learning for sustainability and higher education.

Anybody can download that quite easily from the internet. And my thinking there was that many academics would say, look, I'm busy. I've got no time to take anything else on board and there's enough change going on already. How am I supposed to cope with new stuff? Which is fine, you know, that's that could be true but they might also say, I look at the TV and social media and I see what's going on and I'm concerned for the future and my kids at home are concerned and my students are concerned. And then they might say, I wonder if we're doing enough to prepare students for a changing society and an uncertain future.

So that's who that guidance is for and I had a section in that booklet called Why Bother. And this included factors like student concern, relevance in the curriculum and increasing motivation to learn, building community links. Also, many institutions, particularly higher education, have been asked about their sustainability and performance, which can be linked to teaching and learning in the institution too. And then also the practical level, employers are beginning to ask about sustainability related competencies. So these are some of the reasons why to bother.

And I've just explained on one of them, which is the student voice because I mentioned it earlier but here the UK National Union of students has been conducting research for more than eight years on student attitudes to sustainability. And year after year, the overwhelming majority of respondents say that universities and colleges should actively incorporate and promote sustainability education and then a brand new student led organization sprung up last year, sprung up last year here in the UK.

And it's called Teach the Future and they've said that so much of what this is a quote now, so much of what we learn at all levels is irrelevant to the uncertain future we are inheriting. Our education is out of touch with the future we face. Our generation needs a transformational education if we are to succeed. So, you know, I think the pressure from below if you like is going to, but it's already affecting what teachers, lecturers and policy makers are thinking is should be part of educational provision but you know my own view is it's our moral duty to educate for the uncertain and unstable world that students are inheriting.

And I think if we don't, we're letting young people down and we need to give them hope. And I think this is where the Earth Charter can be really important by providing a really excellent framework, which, you know, which gives a basis to this kind of approach. Thank you. So in terms of how I could apply ESD into my teaching, it could be by helping students look at the future, be easy to adapt to the uncertainties, cultivate a sense of hope, and use maybe there's chat as an instrument to stimulate dialogue and understanding.

Yeah, yeah, sure. I mean what is concerning is a lot, you know, some, a lot of students know, I'm not sure about it in other countries, but a lot of countries, sorry, a lot of students are exhibiting signs of anxiety and the COVID thing has fed that. But I think, you know, the climate crisis is also playing on young people's minds. So I think, you know, as educators, we need to really take this on board and work with students as far as policy makers allow us to, to empower them, if you like, to create, you know, meaningful learning experiences for them, designing and exploring, you know, ways and means by which the issues, issues which they identify can, can be tackled.

So this, this often means, you know, as far as possible, working across boundaries, as I said, as I said earlier, to so that, you know, instead of being instead of education, this is tricky because, you know, we're actually going counter to educational practices goes back decades, but, but we, we need to be able to design learning around issues rather than around subjects, you know, the issues will, will define what needs to be learned, you know, whether it's using math, art, science, drama, whatever it is to understand, you know, an issue like water pollution or, or energy conservation or whatever it is, rather than say, well, this is a science lesson and, and, and this is a geography lesson and this is the math lesson or whatever.

So it sounds radical, but I think students really relate to and become motivated and they're allowed to be imaginative and creative by looking at taking issues and owning them.

So for example, you know, when I was at university, I remember students working, working on sustainable fashion and they got really, really motivated by that and produced posters and so on. And, and, and they've exhibitions for their fellow students and lecturers about all their findings of sustainable fashion and possible solutions to that. And it was interdisciplinary, you know, and they were motivated. So that's the kind of thing I'd like to see. I love the way you put it to design learning, design learning around issues rather than subjects.

Yeah, it's something I think it's easier for, for any school teacher or principal to understand. Yeah, but it, and if you know teachers are interested in this or lecturers, I, the other way of looking at this is, is from their point of view, and you know, in the, if they do look at the future framework which you can download, I've got simple change models there, where they can, they can look at, you know, whether it's university or school strategy or even lectures and lesson plans or faculty or departmental policies or whatever. And deciding what, what is still valid needs keeping in the largest sustainability or what needs revision what needs rejection and what needs, what needs innovation and so on.

So, so you know that there are ways of provoking and encouraging discussion amongst colleagues to really look at how you can begin to make small changes that may go further.

Yeah, wonderful. Now Stephen, let's look at some of your writings. Of course you have day kids, three day kids of research, writing publications and teaching. So, well, of course we would have to spend a year here just talking about so much that you have written. I would like to ask you to all, to be kind enough to share with us some overview of some of your writings. It could be some of your latest writings, something that you're really interested in your later years, but I picked two of your writings. One, you once you published an article in the Journal of Education for Sustainable Development back in 2010. That's called Living in the Earth Towards an Education for Our Times.

And there's another one that you published in 2011, Sustainable Education, Re-Invisioning Learning and Change. Would you share with us some adjusts of them? Yeah, okay, so you're right, Mirian. I've written so much I get confused myself really about what I've done when. And I checked out the article and the funny thing is that I had a look for it this morning and I couldn't find it because I'm such a model on my computer. So I couldn't quickly find it, but I remember it and I remember why I wrote it. But what I was surprised by is I wrote it 10 years ago.

And the other Living in the Earth I'm talking about. And then the book, Sustainable Education, was actually, I guess it was re-printed in 2011, but it's actually first published nearly 20 years ago, 2001. So yeah, I have been working on this material for a long time, thinking about it. So, for a little bit about the paper, the article, Living in the Earth Towards an Education for Our Times. Now, that paper, like all my work, is informed by a view which I would call essentially relational in nature.

So words like holistic, systemic, ecological are descriptors of that way of seeing things. And the article emphasizes that we do not so much live on the Earth, but in it. In other words, in the Earth system where everything we do has effects and we are affected by everything else. And I remember an experience flying out of London in a plane, obviously. And as the plane rose, we went over a fire. So there's a fire way below on the ground, clearly. But what we're doing is flying through the smoke coming up from the ground.

And I thought, well, that's just really interesting change of perspective, because normally you light a fire and you see the smoke go up and you don't really think about it. Off it goes. But if you're in an airplane, you're receiving the smoke, if you see what I mean. And I was thinking, well, yes, this is... we're living in this ecosphere, this larger Earth system and the human world we've created within it. And so we're participants whether we like it or not within this wider system. So to my mind, that gives us a certain responsibility.

We're not separate from each other. We're not separate from nature. Almost everything we do has some kind of effect on others and on the natural world in one way and another. It might be a tiny effect, it might be large. But we need to recapture the sense of embeddedness which Indigenous cultures have always had. And therefore, that leads us to a more ethical and more, I think, more careful way of seeing the world. All the time we think we're separate and whatever we focus in on doesn't have an effect on others.

Well, that's the recipe for disaster, if you like. So the idea of being a participant in the wider whole, I think, is key. And that's what I've tried to get across in this paper and give the implications for rethinking education. And then the book I called Sustainable Education,

subtitled Revisioning Learning and Change. And I remember I coined the term sustainable education rather than sustainability education. Because I wanted people to move, if you like, from the question, how do we educate for sustainability or sustainable development?

Which is important. I'm not saying it isn't. But towards a deeper question and a deeper tension to education itself, its policies and purposes and practices, in terms of its adequacy for the age we find ourselves in. So even though I wrote it 20 years ago, it's still relevant and it's still current, it's still selling, I think. And really, in that book, I'm arguing for a shift of educational culture from a more, from a sort of control paradigm and managerial instrumental testing kind of paradigm, which I think, you know, has run its course, if you like.

And I think a lot of teachers and students are suffering, really, from the limits that kind of way of seeing education puts on imagination and caring and creativity towards a much more humanistic and ecological approach, which I've argued for in this little talk and for years, really. And I think, you know, we need to, in education, which asserts both humanistic and ecological values, and in other words, it upholds life affirming values, if that book has been successful, which I think it has, not to some extent, it's because that rings a bell with people, you know, it really does.

Yeah, so, and I think, you know, I think part of the issue here is if you look at ESD, and if I think about UNESCO and its plans for the big conference next year, and so on, I've looked at the papers informing that conference, and I think UNESCO has always been a little bit in two minds, and for the, for, for, on the one hand, they talk about ESD, almost as a separate topic alongside other educational topics. And in another way, talk about ESD as a sort of harbinger of a different way, in a new way of seeing education as a whole.

So, you know, you can't have it both ways, if you like, and I think we need to see ESD as a, as a signpost towards a deeper and a wider understanding of the kind of education we need for the future we are facing, rather than as a separate, you know, as a separate approach alongside other approaches.

So that's what I have it for in this little book, which is going to be 20 years old, which I can't believe that's the case. A more ecological approach to education, if you like, more relational approach to education. Well, just a comment on what you just said about the current work of UNESCO on ESD. There's just one point that sometimes I see that is good, that is when they see ESD as an opportunity to reorient and rethink education towards a new paradigm. Another thing is when when their discussions are limiting ESD for the SDGs.

Yes, it's kind of reducing going backwards with the possibilities around the ESD movement. Yeah, yeah, sure. Yeah. Yeah, yeah, I think the SDGs are, you know, they're great in some respects, they really do. They really sparked a lot of debate and good practice. But if that becomes the whole of it, then that becomes a little worrying to me. I'm not saying they're not important, they are important, but they can be constraining. And, you know, I, my argument, which I've written in other cases is another article I did

for the Journal of ESD, actually, was making the argument that we need to look at what conditions made the SDGs.

Necessary in the first place. Now, what is it about the way we organize ourselves and the way we think and the way we do things that made the SDGs necessary? If you see what I mean. So that's a deeper question, because unless we actually look at the patterns which have led to environmental deterioration and loss of biodiversity and inequity and poverty and climate crisis and so on. And unless we look at those, those governing factors, the root factors, we're still on the same path. Maybe a bit more slowly through the SDGs. So, yeah, so, the SDGs, yes, good. Let's do it, but let's look at some deeper questions too.

And we should not miss the opportunity of the current movement on rethinking education to limit it to the SDGs, right? Yeah, yeah, sure. Now, I have just one last question to you, but before that I want to make a comment. I feel that I have been following you for the past 15 years, following you through your writing. I was very honored to have you here actually teaching. I think you took, you taught the first course on ESD at the University for Peace when we launched our new building, the Earth Center.

I remember it well, yes. It was actually a wonderful, wonderful experience for me and for our students at the University for Peace to have the opportunity to have you here. And you really taught that first course that was, that took place in our first child education center. So, I want to share with you that among the many things that I have learned with you in our interactions, mostly through your writings, is your wonderful ability to question and to ask questions. And I think it's such a gift that you have because your questions intrigue thinking.

And I think it's a wonderful element that I have learned from you. And I think it's inevitable and important when we are looking at ways to reorient education in the current time. I want to say this because I want to express my appreciation. Thank you. I would just say that asking questions is a noble tradition. And it goes back at least to Socrates, the Greek philosopher, who went on asking, he never offered any answers. He went on asking all the questions the whole time to the extent he made himself very unpopular and they put him to death.

I hope that doesn't apply to me. But the Socratic method is now known, well known globally as a way of asking questions that need to be asked if you like. So it's a noble tradition asking questions. I think we should always be asking questions of ourselves and others about whether what we're doing is appropriate and sufficient. Yeah, and I did a research on how to go about in terms of values education through the lens of Dirst Chatter. And of course, asking questions is a key element. But the point is that not many teachers, professors, are really skilled in asking good questions.

And therefore it's hard to stimulate the engagement of students. So I now have the last question. It's your from your own experience as a teacher, or even as a student. But there is there any aha moment, one of the most impactful moments in that experience you have had in the education setting that you come to your mind and that you could share with us. You mean, you mean for me? Yes, for you as your you as an actor in the learning teaching

learning environment. Was there any key moments that you could share with us? Oh, that is something that really still stands up stands with me.

Yeah, I mean, it's a good question because in a sense, my, you know, my transformative moments happened in my teens, almost independent of school. So, you know, when I was when I was mid teens or something, I, I had a number of what I would call ecological realizations. So one was, you know, saying all flesh is grass, you know, that everything, everything relates on the plant, everything. It depends on the health of the plant world. Primarily, you know, and that was, that was quite a realization for me and I think a lot of people still haven't quite grasped that.

Yeah, what was that moment that you realize that I can't remember the details of it. But this sort of idea that everything relates to everything else that also hit me around about the, and about the same time. So, yeah, so, so I had a sort of evolving, evolving consciousness over over time if you like, and the, the, the, these, all the debate that went around the Stockholm Conference on the human environment 1972 was very formative for me. There is a book, the book came out written for that period called only one of the care and maintenance of a small planet, written by a woman called Barbara Ward, 1972.

And I read the whole thing covered to cover and, and also booked by Paul Ehrlich called population and resources in an environment 1971, and then the limits to growth also I think 1971. He's also, he's all had a profound effect on me. So it was, it was like, as these are self generated learning, if you like, if you like, rather than, rather than school or university generated. But it did change, it did change my thinking a lot towards how we relate to the natural world initially that was my first realization and then I think, I think, in 1982 was another moment where he really looked at the patterns of new movements, various aspects of human endeavor and link them all together as a holistic approach, a holistic response to the more mechanistic way that humans have done things for years, if you like.

And I still recommend that book 1982. So these are all sort of moments in a journey for me, if you like. But in terms of, I'm going to actually, I'm going to contradict myself by saying there was a moment when I was 12, actually, it's all for a long time ago, in school. And we had an English teacher, and he was quite interested in, in topical issues, if you like, and he got us to look at different newspapers. And until that point, I thought, all newspapers pretty much just said what the news was, you know, that's their function is a newspaper.

But what he got us to understand that different newspapers have different takes on topics. So, you know, one newspaper would say the topic looked like this, another newspaper say we'd look like that. And I suddenly thought, actually, you know, I may not use these terms, but values, you know, values informants, people thinking is key to understanding them. And that was a bit of an eye-opening moment in the age of 12, if you like. And that was in school. I remember that. That's wonderful. You were 12 years old, and you're already opening your eyes that there were different angles of looking at the same thing.

Yeah, yeah, sure. At the same time, I was also reading, 1962, Excerpt of Rachel Carson's book, Science Spring, which was huge, you know, had a massive impact internationally.

And that was about how DDT, which is subsequently banned as an insecticide, was affecting wild birds, because it's bio-accumulation. The toxins were getting into birds and into their eggs, which weren't hatching. So, so Science Spring, you know, again, there was an awakening to me about ecology, if you like, and how all these things relate.

And again, I was just 12, so I was thinking, hmm, maybe the world's not quite as good as I thought it was, you know. So a few issues to be sorted here. And it's been like that ever since, of course. Wonderful. Well, Stephen, thank you so much for joining us today and for sharing just a little bit of your vast knowledge and experience in these topics that are of great interest to all of us. Well, it's been a real pleasure, Mirian, and also to talk to you. And I hope people find it helpful. If you're interested in finding out more about my work and my writing, if I can do a quick plug for my website, which is www.sustainableeducation.co.uk.

That's all one word.co.uk. You'll find a lot more of my material there. And I highly recommend. We have been using some of it for years in the work we've done. And it's a great inspiration to us. Thank you. Thanks so much.

Thank you.