

Ep. 1 - Diversity Outreach Relies on Volunteers: What are we doing to help?

00:08 Hello and welcome to the SheCanEngineer podcast launch episode! This is our first ever one! My name is Laura Hoang; I am part of the SheCanEngineer committee and I'll also be your host. We have two very special guests for our launch, and so I better get started!

00:25 I'm joined by Martina Capecchi who is also part of the SheCanEngineer committee and she's going to tell us all about the exciting things that you can expect from us this year and also how you can get involved. So welcome Martina!

00:40 Hi Laura, thank you! Hello everyone!

00:43 Please could you just introduce yourself, for the benefit of our audience.

00:48 Yes, so, I am Martina, as you said, and I am a Facade Engineer. I've been working in London for the past 6 years, I was in WSP for almost 5 years and I recently moved to a Facade and Structures Firm called Eckersley O Callaghan, still in London. So, yes, that's what I do.

01:14 That sounds quite cool actually! So I've just introduced us both as SheCanEngineer committee members, but actually what is SheCanEngineer? Who are we and, you know, what do we do; what do we believe in?

01:30 Yes, so, SheCanEngineer is a committee of volunteers from different professional engineering institutions in the Greater London region, and so we are all very passionate about promoting and raising awareness of the gender inequalities within the Engineering industry, but also, and mainly, promoting and celebrating the accomplishments of many successful female engineers, and that's what we want to do across all of our events and initiatives. Another topic that we really care about is of course inspiring younger girls and younger generations into STEM subjects and we do that by of course showcasing the amazing opportunities and experiences that people can get involved within engineering and so our events are really focused on these two main aspects - STEM outreach with students and schools, and events for young professionals and professional engineers, really to showcase and celebrate the achievements of women in engineering. So yeah, this is what we do, it's really exciting and we do that basically every year on the occasion of international women in engineering day which is in June, and so we spend the first half of the year basically planning

and organising everything for this event. And then the remaining part of the year, of course, we look to keep the momentum going really, with all of the social media initiatives, this podcast is a great new addition to our activities, so we do plenty of different things, really, to raise awareness around this topic.

03:37 Yeah, and it's really been exciting to get involved, I mean, we've been established since, what, 2016? And we've had lots of really cool stuff going on, we've had really great events. What do you think was our biggest, I guess, success, or successes in the past years?

03:58 So yeah, as you said, the committee started organising events from 2016. I personally participated in one of the first in 2017 and I got really inspired and so for the following year, I decided to join the committee as well. So I really started working with the committee in 2018. And since then, I really saw this movement, let's say, or this committee and the outreach really growing through the years, and I think this is one of our biggest achievements, for example, in 2018 we saw a big difference in the outreach that we managed to achieve, thanks to, I think the very successful social media campaigns, and also of course really successful events. So the biggest success I think is that it's really growing in the years and keep going despite, I don't know, the pandemic, and all of the difficulties we've had in the past years, and yeah it'll be really good to see, you know, the momentum going, and things getting even bigger and more exciting for everyone to get involved.

05:25 And like you said, you know, the fact that this podcast is a new exciting thing that we're doing for 2021, well 2022 even!

05:33 Yes, this is really exciting as well, this is part of everything we're trying to think of to, you know, keep everyone engaged throughout the year, because, yes, women in engineering of course is the major event, but we don't want to forget that we need to keep talking about these topics throughout the year. And so, I think the podcast, in this case, is like an amazing occasion to kind of, keep ourselves talking about this topic, and the idea we had for this podcast is to have an episode every month, building up to the event in June. So our main topics that we were going to explore with our guests are, for example, the importance of education, as we talked about earlier, and then other main topics would be around the importance of mentorships programmes or the importance of role models, and networking, men as allies, or career breaks and returning to work, the gender pay gap - so lots of very hot topics, I would say! But again, to raise awareness over, you know, in the industry overall around this topic, and keep talking about them throughout the year, not just in June when it's women in engineering day, so I think it's exciting.

07:01 It is, and I think it's really exciting to not only celebrate, but also raise awareness of the importance of diversity and inclusion in engineering. That is, kind of, the motivation for the majority of people who join the SheCanEngineer committee, the fact that we're all, sort of, passionate engineers, we're all associated with professional engineering institutes, well the majority of us are. and we've come together and I think one of the things that's really great is actually showing that there are so many different types of engineers, even within, you know, women in engineering, for example, the fact the engineering industry is so vast and I think that our committee is a pretty good representation of that, just in the diversity of our jobs!

07:55 Yes, 100%! I think actually, this is one of the main things that I enjoy since the beginning when I joined the committee in 2018, and yeah, as you say, the diversity of and the broadness of engineering, even between ourselves, really, I don't know, inspires me and yeah, you get the opportunity to work with very different people with different backgrounds as you, and it really, I don't know, pushes you a bit outside of your comfort zone, with all of the activities. For example, I get to, again, manage the social media campaign, or speak with senior leadership in my company to get sponsor approvals, or manage speakers, organising the venues, so lots of different activities that you wouldn't get exposed to in your day to day jobs, so these two were the main things that really excited me when I joined, and that's why I stayed with the committee for this many years. so, as you said. Also the committee itself is a great showcase of all of the diversity that we have in engineering.

09:13 100% and I think it shows when we did all the different events as well. It was a little bit more difficult showcasing it virtually, but when we have our, sort of, in person events and the attendees, who tend to be school children can talk to the volunteers from the SheCanEngineer committee and the other volunteers who are volunteering on the day, who are all from very different engineering backgrounds, and I think it really does demonstrate to the students that there is, you know, what I say, engineering- there is something in engineering for everyone.

09:56 Yes, yeah, that's really inspiring. And, just on this point that you mentioned, one of the things we are trying to do, one of the aims we have for our STEM events, again, yes, showcasing engineering to students and inspiring them to choose STEM subjects in GCSEs and A Levels, but also we gave these the students the opportunity to also get in touch with representatives from the professional engineering institutions, like the ICE, the IMechE, IET, IStructE, all of these institutions we work with, so again, I think that's really really good students and good for the engineering industry as a whole. And regarding you point of in person meetings- of course, as everyone knows in 2020 and 2021, we weren't able to do in person events, but we aim, and we hope to go back to a live event in 2022, and that will be at the

Barbican, and so everyone stay tuned for that! We really hope to be able to get to in-person events soon.

11:11 Definitely, definitely, I'm so excited for it! You know, it's going to be - we're back, we're going to be bigger and better than ever!

11:22 Really hopeful!

11:23 Yeah! I spoke about the committee - you can get involved with, you know, you spoke about how you got involved with the committee, but also, we have non-committee members who volunteer as well. So for those people who are listening who think 'ooh, that sounds really fun and how can I get involved?' - How can they get involved?

11:42 Yes, plenty of ways to get involved. So, first, without committing really much of your time volunteering, you can connect with us on social media, and we are on, of course, Instagram, Twitter, LinkedIn, so you can just search for @SheCanEngineer and you'll find us on these different platforms, and now of course, following the podcast on Spotify and other main platforms. That's the first, so you get up to date on the events and initiatives that we do. Another thing is, of course, participating in events, so first of all, maybe the event we will have in June, or other STEM events, if you're interested, following along with all of our activities. For companies, there's a possibility to get involved as sponsors or collaborators, so if any company wants to, you know, get involved in this way, and really participating and getting a little bit of exposure in our events, that's another way of getting involved. And another way of getting involved. If you're interested, of course, in joining the committee as a volunteer member, we usually have meetings every two weeks, maybe a bit more often closer to the events, but it's really up to you how much you want to get involved. SO if you do want to get involved, then you can write us an email to express your interest, or anywhere on social media really, so we'll be really happy if you wanted to join us and the team!

13:32 Yeah, we'll be posting all sorts of stuff on our social media anyway, so that's a great way to keep up to date as to what's going on with us, and if there's anything that you like the look of, let us know!

13:45 Yes, exactly! First step, I would say - social media, follow us and engage with us on social media, that would be, really the best way of getting to know us and what we do better. And yes, if you are also very passionate about this topic as us, we'll be very happy to have you on board as well! So yeah, follow us on all social media platforms!

14:12 Well, Martina, we've covered quite a bit of ground there, introducing the committee, what we do, and how anyone can get involved!

14:26 I always get carried away talking about this committee, so sorry if it was too long or too much information!

14:30 Oh no, it's good! It shows your passion, and we're always passionate on the SheCanEngineer committee! But if anyone does have any, you know, questions, reach out to us on social media, but yes, thank you very much Martina!

14:44 Thank you, Laura!

14:45 It's been a pleasure speaking to you!

14:47 Thank you very much!

14:48 For the second part of our launch episode, SheCanEngineer thought about who we'd love to have as our guest for our launch- someone who embodies our objectives and truly inspires us and I'm having a bit of a fangirl moment so on behalf of the committee we are delighted to welcome Dawn Bonfield!

15:04 Thank you that's very kind. Thank you for inviting me!

15:10 Thank you so much for being here and speaking to us. Dawn, could you tell us a bit about yourself and your wonderful career journey?

15:17 Yeah sure, so I am a Materials Engineer by background, went to Bath University, did Materials. Went on from there, worked in Citroen, at the car plant, doing research there on materials; then went on to British Aerospace at Filton, worked in the Sowerby Research Centre on composite materials research; moved over then to MBDA in Stevenage, still on, kind of, Systems Engineering and materials work. And then, at that point, I had children, so I got married, moved over to Stevenage, and had children, I think that's when my career drastically changed, where I couldn't really very easily get back in to the career that I'd had at MBDA, and tried to work part-time for a while, and that just wasn't really working out - it's probably a very long story and now's not the time, but I decided to stop that career really and do other things. And actually one of the really really important things that happened to me then was that I didn't

let my Chartered Engineer certification go- my dad actually paid for that and he said, you know, "keep that going because you never know, you might want to get back into Engineering, you know, when you've finished this career break."

So I had a career break from Engineering, did lots of other things, like, you know, ran the local village playgroup, became a childminder, started working for the National Childbirth Trust as a Discussion Coordinator. And then, after a while, actually, I wanted to get back into Engineering, so I started to volunteer, actually, with the Institute of Materials, Minerals and Mining- which has always been my Professional Institute, and, yeah, that turned into a job really. Actually what I wanted to do was go to conferences, and I wanted to go to conferences free of charge, so I said, well, I'll be the runner in the room, or I'll, you know, do something to earn myself a place at the conference, and then that turned into a job as a conference producer. So I did that with the Institute of Materials for a few, quite a few years really, and that was really interesting because I organised these one-day hot topic conferences, which were fabulous for my own learning, if you like, because they were all on different subjects, and just really interesting and top level, for people who wanted to catch up with a particular topic. I did that for a while, and then changed jobs, oh gosh what did I do then? Oh, I think I started to volunteer at that point, actually, for the Women's Engineering Society, because they're near me in Stevenage- they're based at the IET (Institute of Engineering and Technology) in Stevenage, so I volunteered again with them, and then, gosh, they were in a place where they had just lost their office manager, so I started going into the office, and kind of took over managing the office, which was, oh my goodness, it was almost the best career I'd ever had, because I, it reminded me of when I was little and I used to play at being the postmistress or whatever and, organising things, I spent so long organising the office and getting things in order, and then answering emails, and sending things out, so yeah, that was really great, and I really enjoyed doing that. And then that just progressed bit by bit and I was answering more and more queries that came into the Women's Engineering Society and then getting more into the topic of Diversity and Inclusion, which I hadn't really noticed before, I'd just been getting on with my career, I guess, I hadn't really paid much attention to that, but I started paying more attention. And then, yeah, one thing led to another, really, and I working at the Women's Engineering Society full time, everyday, for quite a few years, before I became Chief Executive, because it turned out that we were starting to get in sponsorship money from companies, and we had, you know, I was working for no pay at that time and it didn't really seem very ethical that we were taking money from companies and delivering a service, or expecting somebody who wasn't being paid at all, to deliver a service that was paid for, if you like, so I worked there at the Women's Engineering Society and then I moved on from there at about, 5 years ago, I got a visiting professorship at Aston University, and started working on Inclusion in Engineering, so inclusive engineering outputs, as opposed to looking at the engineering sector itself. And that's then now become what I do for my career these days, I

guess, I'm now also, I still work at Aston University, and I'm also at Kings College London as an Entrepreneur in Residence there, and the focus there is helping people, helping undergraduates really think about sustainable development goals, and how they can use their engineering and technology. So it's a bit of a - yeah, not a very straight line career, and it's a bit all over the place, but that's how I've got to where I am now, I guess!

21:08 That's really amazing! I mean, I think with all careers, you never really know where it's going to take you, but that's a really fascinating career journey that you've had so far! So, just on the time you were with WES (Women's Engineering Society), was that around the time that, was it 2014 you founded INWED (International Women in Engineering Day)?

21:39 Yes, yeah that's right. yeah, while I was there, I noticed, in that year actually, in the March, I noticed that- I think it was 'Engineers Without Borders' had done a big spread about women in engineering on that International Women's Day. And I was really impressed with that, and I hadn't really seen much about, you know, celebrating women so much before, maybe, I mean, for sure it was just because I hadn't really been involved with that diversity and inclusion topic for a long time before that, but, you know, I thought it seemed like a really good opportunity to use a particular day. I thought, you know, you can always use International Women's Day, but, it seemed sad to hijack that day to try and make engineers celebrate engineering women on that day, and also it gets lost in the mix of everything else that's going on, so WES at that time was reaching its 95th anniversary, and that was coming up in the June, so it seemed like a really good way of celebrating their 95th anniversary, to have this day. So the 23rd June is the day that they started, WES started, in 1919. So, that's what we did. And I was working at the office at the time, so I just decided, I got IET actually, and they were really supportive, and they agreed that I could send out all of the comms, all of the, you know, resource packs from there. So I did that the first year, and it was really, oh my goodness, it was really hard work and I remember getting my children - I've got three children, I remember getting them all into the office and we stayed there really late one night and we were stapling, using that printers at the IET- printing everything out, stapling it all together. I mean, you wouldn't do that again - and obviously in future years they didn't send everything out by post, but in those first few years, certainly that first year, we sent everything out by post. And that was great, it had a really good start that year, and then it just grew from there, and we got more sponsorship for the day, and then, the next year, or the year after that, it turned into International Women in Engineering Day, and yeah, it's been going strongly every since! And thank you, your group and the support that you've given because you've been

involved, you know, right from early days, supporting the day, so yeah, it's a real, it's really great that you have given that support.

24:11 Yeah, and I think INWED is such an incredible initiative, a wonderful day for celebrating the amazing achievements of women in engineering, and actually, you know, showcasing those inspirational role models. One of the things I had trouble with at school was not having those visible role models - they were out there but I didn't know about them at the time, and I think things like INWED really help showcase that, and it shows that engineering is for all. So it's an incredible initiative and, I mean, we're really, I'm really grateful, and SheCanEngineer are really grateful that you actually started it all, because I think without you, we wouldn't have it!

24:50 No, that's true- well I'm really grateful for that, and I've had lots of people over the years come to me and say, you know, 'we did this on INWED', or 'we used INWED as a springboard to do something else', and I think it's really good. You know, one of the really important things right from the very start was that it wasn't owned by anyone, and it wasn't something that people were helping with, it was something that they owned themselves. And that was really hard, especially the first couple of years, I had loads of people say 'oh, well I'll help you organise that' and I'm saying back to them 'no, I don't want you to help me organise that, I want you to organise something yourself, and you just take the comms, the logo, whatever it is, and you do it, and if you can get sponsorship for it yourself around that day then absolutely do that, it's not controlled by anyone, it's free for everyone to use, so I think that was partly why it was so successful, because people could take it on and do what they wanted with it, and you know, feel like they had ownership of it.

25:52 Yeah, well I think that's, you know, that's one of things that we, as SheCanEngineer did, we sort of corralled with the different representatives from the other Professional Engineering Institutes and made the event our own, and what we wanted to do with it.

26:11 Yeah, that's right, and then you can have the focus that you want, can't you - you're not driven by somebody else's focus for that particular year.

26:19 So, I mean, you're super busy, with all the amazing things you do, you've got all your outreach, all the professional institutes that you're involved with, and the Societies, on top of your day jobs - I say jobs because you're a visiting professor in two universities, and you're

a director of your own company, Towards Vision - and just earlier this month, you were at COP26! But you still manage to find the time to fit groups like us, like SheCanEngineer, into your schedule - you've supported us from our very beginning, around 2016 it was when we came about, and we've been really grateful for the support, and it's still, like, quite surprising, in a good way, that, you know, we still have your support throughout all of this, and I think my question to you really is - why do you think these groups, like us, are so important and why are they so important to you that you fit us into your busy schedule to do things like this - a podcast recording?

27:26 I think, you know, if it weren't for groups like yours, and like the work that lots of, like I do, and lots of people you and I do, I think we wouldn't be getting anywhere actually because I don't see that there's enough work that's done, although I see people talking about diversity, you know, in those positions of power in companies, in professional institutions, there are not that many initiatives that I could actually point to that show me that people are taking leadership at the top level. And so I think if it weren't for the grassroots level organisations, like yours, like WES, like WISE, you know, all of these groups that we have that do fantastic work - I just don't think we would be getting anywhere. And sometimes, you know, that makes me kind of sad really, in lots of ways, and angry in lots of ways as well because I think too many people are saying how important this is but then leaving it to people you and I who do this in our spare time, if you like, so taking time out of our careers to do this. And one thing that really, when it really struck home to me, actually, was - I was judging some awards for Mark McBride-Wright, he had some EqualEngineers awards, and they had - I was judging some apprentices, apprenticeships, apprentices sorry, and there were male and female apprentices, and the male apprentices were doing lots of great stuff for their careers, so they were getting on with their careers really quickly, and, you know, doing the extra - the extra time and work that they were putting in, they were doing, they were dedicating to their career, if you like. But all of the young women, all of the extra time and energy that they were putting in was devoted to things like increasing diversity and inclusion in our sector. And that really struck home that actually- and the comments that came back actually, when you're reading those young men who had done this work for their careers were things like 'oh, you know, he's got on so quickly now, he's finished all his apprenticeship work and he's working as if he's a full member of the team and nobody realises he's an apprentice any longer because he's got on really quickly and made such progress' - and I'm thinking to myself 'well, you know, this seems really unfair because the young women were doing fabulous outreach work, but the young men didn't

have to do that, and so they were getting on better with their career. And at that time, I was working, for a short period of time, I worked at Aston University as their Director of Engineering Inclusion, and we were, we created a post so that we could apply for a Venus 1 Gold at Aston, and it really did worry me that I was then looking at those women who had progressed in their careers from being a young engineer, and then not being able to compete at the same level, and not being promoted as much, and not doing as well in their careers. And I thought 'well, we're celebrating these young women who do all of this outreach work, and yet it's stopping their career progress in some ways because they're spending their time doing this because we have to do this because we don't have the diversity we need, so yeah, it's a double-edged sword really. While I know it's needed, I also feel sad that it's the women that are doing it because they see it's needed, and yet it's not the men who are doing it, who get on with their careers and make progress and get promotions, and get all the rewards, if you like, that come with that, and I think you mentioned before about whether or not it's good for us to have awards to celebrate this, and I think it really is good to have awards that celebrate this work, because otherwise we would get no celebration or no recompense for doing this work. But I do sometimes worry that doing this means that we're taking time out of our careers and concentrating on that, and concentrating on outreach, and other people, you know, our allies, the men in the industry don't have to do that, so don't bother and then they get on with their careers. So yeah, I don't know what the answer is really, but it's vitally important - going back to your question really - it's vitally important that it's done and it's not being done elsewhere, so I think it's really important that we do it.

32:16 I think that's a really interesting observation you made with the apprentices and the judging - because, me personally, I do do all of the, sort of, extra curricular outreach stuff, but I think of it as an extension of my career, and I think of it as, I guess, ensuring that we have the next generation of engineers, and you know, it kind of like - I guess if you're going to put, sort of, a name to it - it's sort of, like your pipeline management, your talent management. I see it contributing to that, so it's... and I never really thought about how - when I look at my male peers, that they don't see it that way.

32:54 Well, that's the key isn't it - to make sure whatever you're doing is seen as being part of your professional development and is rewarded as such, and not just something that you're doing that isn't contributing to your career, so I think that's really part of leadership - that they need, you know, it needs to be recognised and rewarded in the same way as

anything else. And often, I think, for too long we've seen work that is done on diversity and inclusion as not actually being really 'engineering stuff' and you know, 'oh well, you're doing that, but it's not really Engineering'. No actually, it is really part of what we need in engineering. Ok, it's not, you know, mechanical engineering, but it's equally as important in the whole of the, kind of, system that we work in, so yeah, I think it's really important that we do recognise that work and that promote people doing it, on the same basis as their technical work, if you like.

33:56 So following on from this, you mentioned your time at the universities, and your role as Director of Inclusive Engineering, but also looking to the Professional Engineering Institutes and of course industry, what role do you think all these play in addressing and supporting diversity and inclusion? Because you see, like you said, there's a lot of talk about it, but it almost sometimes, I do feel like it can be quite shallow - so they say 'yes, we're doing lots of stuff in diversity and inclusion, but then when you get down to it, I don't feel like there's actually as much substance to it as I first thought, so - I guess this is an infinite question, but what more could be done?

34:42 Yeah, I know what you mean, because I'm part of GEDC (Global Engineering Deans Council) and every year, they have awards, and they're always looking for things to be nominated for these awards. And I look around, and I think 'OK, so if I looked across the whole country, what would I nominate as being absolutely best practice in terms of, you know, this is a great initiative that this university has done that could be entered into this award'. And I actually really struggle to find things that I think 'somebody has gone above and beyond to do something really, you know, special - that isn't just the usual thing that you just mentioned that doesn't really have any substance to it'. I don't know, it's a huge question, and I think about it often, obviously! I think sometimes it has to start a bit before you get to like the university sector, for example, because I think there's a massive problem in schools. So I think the double science and the triple science are a big issue, because I think, in general, there is not the pathway from double science into science at A Level, and really you need science A Level to go on to a career in Engineering. And there are fewer girls that do triple science, so there are more girls that do double science. In fact, there are only a quarter of the population, you know, the school population, that do triple science anyway. So you've already massively narrowed the pipeline by three quarters, for those ones that have an option of doing a science A Level. So, at that point there, you've got a quarter of the number, the total number that could do science A Level. And then, we know

what it's like with science A Level, and the number of girls that do Physics - it's something like 20% of girls do Physics, and lots of universities still need Physics to go onto Engineering, so we are - even before you get to Engineering, you have hugely narrowed the pipeline. But then the ones that do make it into Engineering are often, more often than not - you know, nobody, no girls generally get into an Engineering degree without being very intentional at doing that. And the ones that have got there through intent often don't want to - are not so bothered about doing things that, you know, help them, because I think they've either had an easy-ish pathway through, or they've overcome barriers to get there, that mean that they're not always - they just want to get on once they're there I think. So I think, at that point there, when you're in an Engineering - if you're looking at an Engineering university course, for example, it's difficult then, because it's almost too late - the ones, the people you've got there are the ones who have got there by intention and they are all, more often than not, really keen to progress, and they will progress at all odds really, so they often don't see that they need any special attention at all. But I think what universities can do is look at their entry requirements, for example, look at whether they're putting girls off coming in. They can go that one stage back - making sure that the pathway through that they've got from there, you know, work with local schools, make sure that there's a really good pathway through into their departments, and just bring in that diversity right from the word go, and I also know that once we get women into engineering degrees, they do need support, even though they may not realise that, especially, and I've seen it at a few universities, where they go out into placements, for example, that could actually be the first time that they've seen any discrimination and they do see that in the workplace, and that's really often the thing that might put them off then going into a career in engineering. So I'm not sure I've answered your question properly, but I think it's, you know, there are things that can be done, but they're not always - they don't always have to be done at the university level. I think we need to look back, I think we need to be more intentional in bringing in people with different qualifications, giving the extra support they need if they do, making sure that we get good retention of students as well, that they, you know, are not, kind of, brought in and then left to drop out when it's not what they were hoping it would be. So, yeah - more action, more culture change, more intent in looking at the problem really, and making sure that you don't just ask your young engineers if they need any help. because the chances are they will say that they don't because they've got to that point then when they almost want to disown the fact that they are, you know, women, and their femininity because they're in an engineering culture where they have to fit in. So I think that's a big problem that we've got in the industry.

40:18 Definitely. I struggled for a long time to, sort of, find my identity within engineering. And I think I've found it now, and I think I can be me, and I think that is - has been a change within industry, because I do remember my first day on the job, and the comments then and the culture then was very different to how I feel now, and how I'm treated now. Do you think there have been noticeable changes within the last few years that actually have shown progress in diversity in engineering?

40:58 I do, and I absolutely think that you've hit the nail on the head there with that being one of them, I think the culture change that we've had in the UK generally about diversity and inclusion where we've had real wake up moments - with the 'Me Too' issues that we've had in the last few years really has allowed people to have a voice now and to start to own their identity, and to start to realise where things are not equal for them. Before that, I think it was a bit swept under the carpet and we didn't have courage or enough voice or enough support to mention things, but, you now, I know what it's like in anything where you almost get sensitised to something, so as soon as you start to see an inequality, then it's- you almost can't not see it then, you have that switch flicked on if you like, which then alerts you to something, and then people now do think they are able to speak up more because we have that culture really, that has enabled that. We're seeing it in cricket at the moment, so people are speaking out, and we've seen it in lots of different areas too, and I think that can only be a good thing because we have to- you know, if we talk about diversity in engineering, if we're not allowing people to own their identity, then we're just, we might as well not bother to have that diversity because we've still got a homogenous group of people who all act the same way so I think that code switching where you have to leave your identity at the door is a real detriment to the sector, and I think, you know, undoubtedly there are more women in engineering now, and I think, yeah, they are more inclined to speak up. And you see, you do see, you know, easily now, you can pick out lots of people that speak up on this topic so that is definitely the change I would point to.

43:00 We can talk about this for hours and hours, but we're, sort of, running out of time! Thank you so much for being here, and for your insights and sharing with us your incredible journey. Before we, sort of, leave it there, do you have any last closing remarks?

43:18 One of the things I've realised in the last few years, I guess, while I've been working on inclusive Engineering outcomes is that getting that diversity in our sector is not the end

of the road, it's a real step on the way to something else, and that something else is making sure that we need - we need the diversity in our sector and we need it because we've got a job of work to do which is to create a world and, you know, a set of products or services or built environment that is accessible to everybody. So I think we need to make sure that we are understanding why we need that diversity, and it is because we have to enable people to own their diversity so that they can speak on their behalf, but on behalf of the wider population, and that we can, you know, build this future that is more inclusive and more accessible to everybody. So I've been - you know, I think if you work in diversity and inclusion, you can get a bit disillusioned if you're not careful because you see the same conversations coming round again and again and again as people, kind of, catch up. But I think if you - for me, it's helped me, really, to keep in mind that the reason we're doing this is really important and it's because we need to create this future world. You know, what I realised at COP26 a couple of weeks ago was that climate change is the big issue of our day really, and we need as many people as we can to be involved in finding the solutions to that and the other issues that are important around the sustainable development goals. You know, what is it today - Sunday 21st November, and the headlines in The Times is about bias in medical technology because that technology hasn't been tested on people with different colour skin. Now that is absolutely, you know, what we've been talking about in terms of needing more people in our industry so that we don't have those situations. So yeah, that's what I'm focussing my own work on now and I find it a really positive thing to be involved in. So yeah, keep up your great work is all I want to say to you because you do a fabulous job, and yeah I'm always happy to support and be involved in any way that I can.

45:50 That article on the bias in medical tech is actually really interesting, and it's even more interesting that it's making headlines, because topics like this may not have done so, you know, a few years ago.

46:03 Yeah, exactly.

46:04 Thank you so much, Dawn, for taking your time out of your busy Sunday to speak to us today, and we really really appreciate your support and we'll hopefully speak to you soon!

46:20 We hope you've enjoyed the conversations with Martina and Dawn - two very inspirational role models, who as you can tell are passionate about diversity in engineering. Hopefully we'll see you next month for our new episode!

