

Truth with Vigya Sharma
(T: Tracey K: Katelyn V: Vigya I: Intro)

- I: Welcome to Indigenising Curriculum in Practice with Professor Tracey Bunda and Associate Professor Katelyn Barney.
- T: Hi everyone. I'm Tracey Bunda and welcome to our podcast series, Indigenising Curriculum in Practice. I'm an Ngugi/Wakka Wakka woman and the Professor of Indigenous Education at the University of Queensland. I'd like to start the podcast by acknowledging Country and the various countries from where you, our listeners, are located and pay my respects to elders past and present. I acknowledge the ongoing contributions of Aboriginal and Torres Strait Islander peoples to society at local, national and international levels. You may very well ask, what is the connection between acknowledging Country and Indigenising curriculum?
- It's important for us to think about Indigenous knowledge systems that have helped inform practice on Country and that's exactly where universities are located. They are located on Aboriginal Country and the knowledge that we bring to our students about country, will enable those students to have a more meaningful relationship with this country. I'm joined by my colleague and cohost, Associate Professor Katelyn Barney.
- K: Hi everybody. I'd also like to acknowledge the traditional owners of the land where we're recording and also where you're listening from, and pay my respects to their ancestors and their descendants who continue to have strong connections to Country. I also want to acknowledge that where we're recording has always been a place of teaching and learning. I'm a non-Indigenous woman living and working in Meanjin. In this series Tracey and I are interviewing Indigenous and non-Indigenous academics about how they're indigenising curriculum at the University of Queensland.
- T: Together, we are going to ask questions to unravel the why, the how and the when, of indigenising curriculum.
- K: Our theme for this episode is based on the principle of truth and our guest is Vigya Sharma from the Centre for Social Responsibility in Mining in the Sustainable Minerals Institute.
- T: Welcome Vigya. Can you introduce yourself in whatever way you feel comfortable?
- V: Thank you, Katelyn and Tracey for having me. I am a non-Indigenous woman living and working in the Meanjin, Brisbane. I grew up in India, so spent the first 20 years of my life there. I am a rather unusual academic in that I have degrees in both engineering and social science. I'm a full-time researcher at the university trying to unpack big, complex problems around energy and mineral resource use, and what happens to regions when these resources are present or absent. I also teach an undergraduate course called Introduction to Humanitarian Engineering which I believe is why I'm here today.
- K: Thanks Vigya. Yes, we are really interested in the Humanitarian Engineering course that you teach. Can you tell us a bit more about the course and how you're Indigenising the curriculum?

V: I codesigned this course in 2020 with a Senior Academic, Professor Paul Lant from the School of Chemical Engineering. The idea was to really make engineering more appealing and more inclusive. We wanted to introduce more women to engineering and that was a driving force. But we also recognised that the modern engineering problems are going to be... are already but are also increasingly going to be more complex and wicked. And the traditional engineering education, whilst it is quite sufficient, I'd like to believe is insufficient to tackle the problems of our modern contemporary life. Just to name a few, poverty, climate change, disasters, these are the defining features of our times. Although we require more engineers than before, I believe that traditional engineering does not nurture engineering minds in a way necessarily that is creative and socially innovative. So that's the purpose why we designed this course and it's gone on well so far.

T: I think that's great. One of the things that we have done in terms of indigenising curriculum, we set up a number of principles. One of those principles is about truth and truth telling. So what you have said would be a really great challenge for the students to understand truth in a different way. How are you working with the students to bring that understanding of truth around different types of knowledge in engineering?

V: The course is wide ranging. We discuss the role of engineers in achieving for example, the UN Sustainable Development Goals. Here in Australia, we bring the focus on the Close the Gap Initiative. We want to really be able to ask our engineering students to understand the principles of appropriate technology and human-centered design, for example. Although it's still early days and we've only been running the course for four years, we believe that it was really important for UQ's engineering students to be better aware of the social, cultural and institutional contexts in which these modern engineering problems are located. Which surprisingly, very few seem to be mindfully aware of.

I say mindfully because they are aware of the challenges in remote Indigenous communities in relation to energy access, for example. But they're not necessarily taught to tackle them head on. That's where this course is a step in that direction. So we do a couple of things to Indigenise the curriculum. One, we looked to bring in content from some excellent work that the Centre for Appropriate Technology, based out of Alice Springs, has done. It's surprising, not many students who have ever taken this course, not a student has been aware of this, of the presence and existence of this centre. It's been here since 1980. We try and bring appropriate technology and design principles from what the centre, based on the examples that the centre has been engaged in.

Every year I talk about the Centre. I show them a short eight minute video which is an ABC production. But it's a nice exposure to the students about the real-life engineering challenges existing in Indigenous communities that's not front in mind for them. It really tells them about what is the value of human-centred design. It's a simple case about a washing machine design. But a plastic washing machine that you and I use here in our urban households is not going to survive in the harsh weather in remote Indigenous Australia. The video talks about that case. It's from many years old but still so relevant today.

The other thing we do is we have been quite purposeful in seeking and inviting guest speakers, either Indigenous, so Aboriginal or Torres Strait Islander peoples. But also, our access to these knowledges are limited in some ways. We also then do invite non-Indigenous people but who have spent all or most of their professional lives engaging closely with Indigenous peoples, to bring some of those perspectives for our students. We have been really lucky to have some excellent presenters who are willing to talk to these students and share knowledge widely. Last year I was able to invite a Torres Strait Islander person who came to the students, did the acknowledgment of country in their own language.

The students, and these are 19 or 20-year-olds. They absolutely loved the idea of listening firsthand from someone who brought cases and photos from their own community about climate change impacts, for example. So this was one of the most well received guest lecturers in my course. We also have the students working on a group project. This is a significant part of the course in that it weighs 30% of their final mark. We align closely with the university's partnership with Engineers without Borders. They bring an Indigenous case study. For the last two years we've been using their case from Northern Queensland from an Indigenous community located between Cairns and Port Douglas.

The students get to hear, get to watch videos and hear from these community leaders about problems to do with water, sanitation, energy, infrastructures. And then the students choose a topic of their own and then work in groups to develop a solution. Some of the solutions have been really innovative. Native plant nursery for example and how do you create a livelihood option for the community by spreading knowledge around native shrubs and plants? The students really are willing to understand and engage with Indigenised curriculum. It's a challenge that as educators we have in accessing, either accessing that information or bringing it in a form and shape that is really useful and helpful for the students.

Finally, I think we also do keep ourselves open for the course in bringing Indigenous case studies from non-Australian contexts. The contexts are very different here in Australia compared to the tribal peoples in India, for example. But I do bring the case of a mining company and its interaction with the Adivasis or the Scheduled Tribes in India. That provides them a different perspective from an international context which they also really enjoy dealing with and tackling in class discussions. Those are some of the things we do in terms of Indigenising the curriculum.

K: That's really great to hear about some of those international contexts as well as local contexts. I think drawing on case studies and getting students to really work on thinking about what solutions could happen for those communities is really important. Have you had feedback from the students on how they've found that material?

V: I wish I could say that yes we've had targeted feedback on the Indigenising the curriculum part. We don't, but it's an idea that I've been thinking about for a while. We do get feedback in the SECaT reports and the evaluation for the course generally has been very, very positive. It has grown in the last four years. The biggest feedback or the biggest lot of feedback comes on the value of the course, which is that it exposes them to challenges right in their own backyards. But also, international contexts. It exposes

them to ideas around ethics and justice and stakeholder consultations, which other engineering courses, or most other engineering courses don't.

But the feedback has been positive. I would love to do a survey just to see the Indigenous component, if that's attractive. But the students have been really promising, provided promising feedback about the case study, the group work. I think that's a big tick because that's exclusively Indigenous. I've had very few students who have... I can count on the fingers of my one hand who have come back to say that, "Look, we really struggled with the group work." No, so the feedback has been extremely positive. Wherever they have struggled, it's mostly around time issues and deadlines and all of that. But the content has been really positively received.

T: I'm really interested Vigya, in a comment that you started to make about the challenges in being able to bring the information to the classroom for students to learn. How do you resolve those challenges that you were faced with? I'm interested too, you talked about being able to access that Torres Strait Islander man to come and speak to the class. How did that happen as well, because one of the things that people who are starting off to Indigenise their curriculum, they worry about, they don't know how to start.

V: No, I hear you completely. I was struggling with similar challenges. One, it has to in many ways, it has to do with wanting to do it. Top-down directive of Indigenising can only go so far. The course co-ordinators, course designers have to really want to do it. Have to see the value in it so the why question is really important for people who design the programs. It is challenging, I won't deny it. I was very fortuitous in that I ran into the Torres Strait Islander gentleman at a UQ climate event, and I just approached him. I just said, "Hey, I heard you speak five minutes ago. I believe I'm looking for you because I want someone who has your skills and who has your deep knowledge, should come and talk to my students. Would you be willing?"

He was so, so generous with his time, with the photos he brought. Deeply personal stories he shared. It was a revelation and that was my first experience. I believe that one, the course designer has to want to Indigenise the curriculum. Second, it has to be front of mind wherever you go. If I hadn't had it front of mind, I wouldn't have approached him because once I approached him, the ice was broken, and he was very welcoming of the idea. I think there is help in the university. We sometimes work in our own little shells that we don't quite know who to approach, how to approach. I also consider myself lucky in that I work with colleagues who are non-Indigenous but have deep knowledge of the Indigenous culture.

Just having a coffee with them has sometimes enabled me to enhance my sensitivity and sensibilities around Indigenous issues. Because sometimes people want to engage but are hesitant to approach those issues because there is a huge legacy and history of not engaging the right way. I would also even go as far to say that sometimes it could be useful to bring in a non-Indigenous person, who has deep knowledge and deep expertise of working with these communities. With Indigenous, Aboriginal and Torres Strait Islander communities to expose students to the kinds of issues. Then there can be a demand driven conversation around Indigenising.

I think at the moment, we are depriving students of that knowledge by not bringing it on their radar. It's our responsibility I think as educators to bring it up to them. So engaging

with a non-Indigenous person who has deep understanding of Indigenous peoples, cultures, issues, can be an easy win. But that can then help bring connections with Indigenous experts who you can then rope in, in phase two of your curriculum design, for example. That's just one suggestion.

T: Could I ask you as a result of all the work that you've been doing in the curriculum, why did you make the decision to Indigenise the curriculum?

V: I guess I would counterargue, counterquestion and say why not? I have to say that perhaps growing up in India, my brain was a little bit more alert to the inequity in society. Firsthand, seeing people not getting the same opportunities that I had. So I think that conditioned my brain and my value system in ways of life and I've brought that in. In many ways into designing this course. I also have to say that the senior academic who I worked with on codesigning this program, is an outlier I would like to believe in the engineering faculty. Or is one of the few outliers in the engineering faculty in fact, in that he was very, very open to bringing in new content, challenging content, provocative content, to push the boundaries of engineering education. I had good support. So I was very lucky that I had really good support that when we proposed the idea... I should have mentioned earlier, but the course is designed in five modules. One of the modules is Australian Domestic and International Challenges. So we bring Close the Gap initiative as a key talking point in the classroom. When I proposed this, he was like, "Yes. Makes sense completely. Why not?" So I think I had support, I had my own values that were driving me to say why not? It's well received now.

T: I think you do have to know yourself as a person and as a teacher and why you are doing the work that you are doing. I think that's really critical to our work within the academy. What would you want other people to know? One key point that you would want them to know about Indigenising the curriculum?

V: Start small. Start basic. I would say for me watching the videos from the Centre for Appropriate Technology was a real eye-opener when I was designing and looking for guidance. So we looked at courses similar to this that we had in mind in the US and in New Zealand and elsewhere and in Europe. The US programs weren't necessarily engaging with the tribal issues there. We knew we wanted to talk about human-centred design then that took me to the website of the Centre for Appropriate Technology. When I saw those videos, they were an eye-opener for me because I hadn't engaged with those issues firsthand myself.

So I started small. We talked about the eight minute video. We said, "Let's start the module by letting the students watch this. Then we'll have silence in the classroom for 30 seconds and we'll ask students reflections." So it didn't require me to engage with an Indigenous academic. It didn't require me to go seek extra resources from the faculty. It started with a small video and then we built on it. So my key would be to start small, start basic but start something that still can be life-altering in the long-term, like meaningful engagement with an Indigenous challenge.

K: Thanks Vigya for sharing a bit about your course in Humanitarian Engineering. It's really great to hear about how using videos as resources but also the case studies and working with students in groups to really explore key issues and thinking about solutions. That's

really great. Thanks for joining us for another episode of Indigenising Curriculum in Practice.

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