**Vaso Elefsiniotis:** Alright. Hello, everybody. Can you all hear me? Zeta, nod. (LAUGHS) Yeah, OK. Alright, here we go. Day three. Thank you for inviting me. I’m going to quickly show some of the resources that VAEAI produce to help with implementing Koorie perspectives in curriculum, in particular, the science one.

So, through these series of webinars, we’ve decided to just sort of show where you can find... Many of you out there might already know about these resources, but many of you might also not. So, if you jump on VAEAI’s website, which is by vaeai.org.au, and that’s our landing page. If you go to Resources, there’s two ways you can see, and I’m gonna take you to the most direct way, which I go. So, I click onto Resources. We see Koorie Education Resources. Click onto that.

And on this page, you will find the Koorie Education Calendar, which I talked about a lot on Monday. But I’m going to jump – is that right, Zeta? – straight to the STEM-related, because that’s today’s theme. Feel free, if you’re not familiar with the calendar, to have a look at this and have a read. Updated every year. But it’s particularly a planning document. We produce bulletins, features and briefs, and there are three documents I want to show at the moment related to STEM.

If we scroll down to Briefs & Features... And over the years we’ve produced...where there wasn’t much around at the time, but this area has grown so quickly. So, Koorie Seasons & Astral Calendars, and you just click onto that. I’ll just show it very quickly without... This is what it looks like. And just a range of different matters that I thought could be at the time...we thought could be related to the whole science, STEM area.

But in particular, Erin, you were talking about seasons and talking about climatic changes. And, you know, the wind that’s always here in this change of season at the moment. And one thing that I always... that I talk about that impressed me when I particularly was living and learning and working in the west is to think outside of the box with seasons. And that’s what I talk about with teachers when I get the opportunity. Yes, there are climate changes. And I just... I’m talking while I’m just showing you what this looks like There’s obviously things in the sky that relate to seasonal change, which we can talk about through the question areas.

But what I...what I often talk about is there are other things when developing a calendar, a seasonal calendar and seasonal activities. And, you know, in Western culture, particularly Judaeo-Christian culture, we might have...we talk about Christmastime and New Years and we talk about holidays. The biggest thing that I learnt that I was amazed was emu egg...emu egg time. And in WA, they call that...that’s a season...that’s a real season and it’s called ‘warlanga’. And ‘warla’ because... Here we go. Warla is the emu egg in the language over in WA called Wajarri. And ‘warlanga’ means ‘in the egg time’. And it is phenomenal what happens in the sky around April, May, June, when the emu, the father emu changes position. And people told me about that for years and one day, I got to see it, and it’s an experience in itself, and that...that’s what it looks like.

So, just keep in mind, when talking about seasons, that we’re talking... Sorry, my son’s here. That we’re also talking about seasonal activities, and you can incorporate particular activities around that. So, anyway, this is... Feel free to have a look in your own time.

This was developed a few years ago and...really wanted to highlight women in...women astronomers. You know, thinking...we might always be thinking about traditional ways, which is hugely important. But what are Aboriginal scientists doing these days is equally, if not... Well, I’m not going to say...put a context on it. But just...I...just... It’s really important.

You’ll see curriculum links in most of our resources, and they’re linked to the Vic curriculum. So, that’s...that’s that one. And if I go back, the other one is the Koorie Perspectives in STEM feature that was made for National Science Week a few weeks ago. Similar, but just much more information.

ATSIMA. If you’re not aware of ATSIMA, ATSIMA is the Aboriginal and Torres Strait Islander Mathematics Alliance. Look ‘em up, Google ‘em, and find out the resources that they’re producing. And this is what it looks like. So, that one’s particularly long. But there’s...hopefully, it’s jam-packed with information.

And this... Going back to our bulletins, this particular...the last issue, this last issue here for August-September, because we have Science Week in August, just showing that off a little bit. There’s a whole section coming up on... I hope I don’t go too far. There we go – National Science Week. And so what happens with the bulletins and the features is we try and make them as up-to-date as possible. So, have a look at...later on, at the calendar, if you’re not familiar with the calendar, for planning purposes. Join our mailing list. And I think it’s on, Zeta’s slide, the address, my email address, basically. You can join our mailing list. But all these resources are online.

This particular edition, there were some amazing...because we were all COVID lockdown, a lot of...lot of virtual events that were going on during Science Week, which I promoted to everyone and forgot to attend myself... (LAUGHS) ...which I’m very, very, very disappointed about.

Here we go. I really wanted to highlight award-winning Aboriginal scientists. And I hope to follow up with them and produce a new feature with some interviews about what they’re doing in their work and how they’re hoping to...to do what they’re doing.

So, that’s my time up, I think, Zeta, ‘cause I’ve got to speak quickly in this section. But feel free to have a look. Join the mailing list and I’ll catch you in the Q&A section. Now I need to work out... I’m passing back to Zeta.

**Zeta Wilson:** Thank you, Vaso. Now... Not sure... What can you see?

**Erin Wilson:** I think you need to share your screen again, Zeta.

**Zeta Wilson:** Alright.

**Erin Wilson:** You’re just at the PowerPoint.

**Zeta Wilson:** Yes? Can we see that?

**Craig Smith:** Yes. Aboriginal resources for STEM.

**Zeta Wilson:** Thank you. Yep.

**Craig Smith:** Yep.

**Zeta Wilson:** Alright. OK, so, here’s another one – CSIRO. Most of you will be familiar with this. And, as we know, it’s Australia’s national science agency, and it provides training and learning for educators and students. So, as you can see there, it’s mainly the programs are designed and aimed for improving the participation and achievement of Aboriginal and Torres Strait Islander students in STEM subjects and professions. So there’s some...there’s a project and that little project you can see down below, the Inquiry for Indigenous Science Students Program. That’s just aimed at Aboriginal and Torres Strait Islander students in Year 5 to Year 9. It’ll just assist teachers with professional learning so they can build upon their skill and knowledge base of science to incorporate Aboriginal and Torres Strait Islander traditional knowledge in science. So, that’s what CSIRO provides.

STEM in focused schools. Just quickly, as you know in Victoria, there’s about 10 Tech schools that are across Victoria. We have centres of science, technology, engineering and mathematics excellence, STEM, which I’m sure, most teachers, you would know about this. And as we know, it’s a link between schools and the industry to provide innovative learning programs.

The Science and Maths Specialist Centres, you can see those there. I know that I had the opportunity that in some of those places like Ecolinc and Earth Ed, some of them will have some Aboriginal perspectives programs embedded into their program as well.

Alright, Resources for Training in STEM. Just another one is Stronger Smarter. As you know, Stronger Smarter provides leadership programs. You’ve got training, there’s resources, there’s tools to support educators and community to build a culturally supportive and responsive learning environment in schools. But what, also, Stronger Smarter provides is that professional learning for educators in the field of STEM, so they too can learn about Indigenous knowledge in STEM. So, that’s available as well.

Alright, now we’re near the end. This is looking at, you know, keeping up-to-date. You can subscribe to the VCAA Bulletin and the F-10 update. And, of course, there is provided Vaso’s details for VAEAI, if you want to subscribe to the Koorie Perspectives in the Curriculum newsletter.

Now we’re up to question time. So, if you’ve got any questions, please share in the chat box and Craig will host the Q&A. And...

**Craig Smith:** Yes, happy to, Zeta. So, please, if you could use the chat box, pop your question in. I’ll read them out to the panellists and we’ll take it from there. Thank you, Scott. Scott writes, “What do you suggest if your school is situated on land that is disputed between two groups?”

**Zeta Wilson:** Aunty...Aunty Fay? Microphone.

**Aunty Fay Muir:** Hi. Hi, everyone. Just make sure that you include both groups in this when you’re teaching, is the best answer.

**Craig Smith:** Thank you, Aunty Fay. Sorry, I’m just reading the next... Question from Amanda – “Are there any resources for the early childhood sector?”

**Erin Wilson:** Yes. So do you want me to...? I’ll answer that one.

**Zeta Wilson:** Yes, please.

**Erin Wilson:** (LAUGHS) Yes, so, there is... I certainly, for myself personally, find a lot of the resources, actually, on Facebook. There’s a group on Facebook called Indigenous Perspectives in Early Childhood Educators. And then, also, I think, if you’re thinking about the VEYLDFs... So, the VEYLDF has...is birth to eight, and there has been a new resource elaboration... And I should...it’s just escaped my mind, the title that’s been produced by the Early Years unit. Really looks at how you can link the F-10 curriculum with the VEYLDF. So, I would certainly still approach the same perspectives. And I know that the Aboriginal languages can be considered from that perspective too. So, there are certainly a lot of resources out there that are being put forward. But Vaso and Aunty Fay might have some other things that VACL and VAEAI have too.

**Vaso Elefsiniotis:** I think, Erin, the web...the Facebook group that you mentioned, Koorie perspectives of early childhood, that question often comes up, when I sort of paid more attention to that group. So, it is about being creative, and it depends on your approach. With our bulletins and features, even though they’re primarily focused around P to 10, there are other things that I try and weave in that are really useful for early childhood. In particular, we were talking about the Big Cuz series. That’s...that one is in the bulletin, this latest bulletin for Science Week. What do you think, Fay? Aunty Fay? (CHUCKLES)

**Aunty Fay Muir:** Yes, that’s a really good one, that one that you were just saying, Vaso, because it just covers a lot in their storytelling and it’s done in a way that the young ones can understand. Yeah. And also, I think...also, I think it’s important that...to get somebody in, especially for early childhood, an elder or a respected person to come in, to talk and tell the stories to the kids so that they understand. They’ll put it in language that the children can understand quite easily.

**Craig Smith:** OK. Thank you for that, Aunty Fay. Question from Elsa. Elsa writes, “I saw fibre technologies in an early slide. Are there any specific resources for this aspect of STEM, please?” Erin, I might get you to kick off the response, if you can.

**Erin Wilson:** Certainly, Craig. So, this is where the Culture Victoria website... And, Zeta, you can probably add in quite a lot here from your own personal experiences, perhaps. The Culture Victoria website and also the Melbourne Museum talks a lot about weaving and other technologies and their use. So, I know that, from my perspective, I was looking particularly at kangaroo grass, because kangaroo grass is a native grass of the Dja Dja Wurrung country, and so, therefore, I can talk about how it was used to weave baskets and that kind of thing. But I’m obviously talking about it from a non-Aboriginal...as a non-Aboriginal person. And so, therefore, as Aunty Fay said, I think it’s really important to use the stories and to find the stories. And so, there are lots of stories through local...through local elders, and then, also, through resources and videos online that are available through Culture Victoria. And then, also, through the Melbourne Museum, there’s some great resources about fibre technologies.

The other thing that I didn’t include in my presentation, because I couldn’t find specific local context, but is also possum cloaks and the use of that development as well. And that was a really, you know... With the Commonwealth Games in Victoria in 2006, that, I think, gives a really nice local context. So, as Vaso has said, start local, and then represent both perspectives and views if it’s on contested land, and then go to regional, and then go to what we call a state.

But I think also, you know, my knowledge and understanding now of what the Koorie...where Koorie land is, or where you would talk about Koorie versus Murri and that kind of thing... Like, we talk about Victoria, but that’s the state of Victoria. So you can also talk about that perspective as well.

But Zeta and Aunty Fay might want to add more examples of fibres and technologies that you could potentially use.

**Aunty Fay Muir:** With the fibre, it’s using, say, the bark from trees to make the string. And also with the...the sinews for making the thread to sew up those possum skins as well. So, that’s really important that they get the full understanding and knowledge of how the cloaks were sewn up in the first place, and, you know, using bone needles as well.

**Zeta Wilson:** OK, so, my thought was what you were just covering as well, too, Erin, when you talked about the possum cloaks. So, you sort of covered a point that I had in mind, and that’s all I had so far, at the moment. So, yeah. Next question?

**Craig Smith:** Certainly, Zeta. We’ve had a number of questions that are really around the theme of, “As a school, how do I get in touch with local elders or an appropriate Aboriginal representative?” So, Vaso, would you like to lead off?

**Vaso Elefsiniotis:** Sure. This question always comes up. We were talking about it earlier with somebody else as well, you know. So, what you have at your disposal, in a way, you know, who’s around you – you have...if you’re in schools and in kindergartens, you have...from VAEAI’s perspective, you have the Local Aboriginal Education Consultative Groups and, in particular, the chairpeople of those groups. Now, there are only 33. Well, look, there’s plenty, but they started with five. There are 33 now. So, LAECGs don’t cover the whole of Victoria, let’s say. So, VAEAI can always come in to help there. But really, in schools, and particularly state schools, you’ve got your Koorie Education Workforce, your KESOs and your KECs. They can certainly help you connect with local community. And then you’ve got community organisations dotted right across Victoria. They’re good starting points. And traditional owner groups. (CHUCKLES) Absolutely. So, it’s about making those connections. Who’s around you, who’s in your school – your Koorie parents, your Koorie families in your schools, in your early childhood services.

Make those connections and expand, and spend the rest of you... My biggest advice or recommendation, because this is how I live my life, is make that a lifelong journey of connection and learning. It is phenomenal, the amount that we can learn. And...you know, and knowledge starts at birth and finishes at death – learning...learning does. So, you know, be open, be open and make these connections because Australia is... ‘Always was, always will be’ is NAIDOC’s theme this year, Aboriginal land. And the foundation of Australia is Aboriginal culture and knowledge and history and people and language. So, I’ll just stop there. But I really want to take the opportunity to just say that, is just...keep learning and keep making those connections.

**Craig Smith:** The next two things aren’t so much questions, but, actually, people have just contributed – thanks very much for this – just some additional resources. One is the Koorie Heritage Trust and the... Sorry, I’ll just mute the microphone. And the other one is the Yarn Strong Sista. And that’s ‘Sista’ – S-I-S-T-A. The simplest way, as always in this modern world, is just Google them. You’ll quickly find their websites. Aunty Fay, I throw it over to you.

**Aunty Fay Muir:** No, I was just giving you the thumbs up, that was all. Yeah, for the early childhood, go through Yarn Strong Sista. They have some fantastic resources, and they’re sort of working on new resources all the time and getting them out. So...there is, you know, plenty of resources there for early childhood, as well as teachers.

**Craig Smith:** Thanks for that, Aunty Fay. There are...there is one particular question, and Erin, maybe I’ll throw it open to you to start with. Got a question from... Sorry, I just need to find it again. The question was to do with special schools. Here we go. From...Vandra...Vanda. Vanda writes, “What about special schools?” I’m sorry, it just kept moving. “Does the VCAA or some of our other co-presenters have anything in particular available for a special school or a special school setting? Any advice would be appreciated.”

**Erin Wilson:** Certainly. Thanks for that question too. So, I think it’s important... Like, you know, I think the nice thing about today is that we’ve recognised that we are talking about birth to death in terms of our learning. And so I’m certainly learning more as we go along. And so, really, if we’re talking about special school settings, we’re talking about curriculum Level A-D. And I think one of the things, and I noticed there’s another comment in the chat there about “Sometimes it seems so big and I don’t really know where to start,” or, “It’s a bit overwhelming.” And I think that it really...Again, look at the curriculum that you’re delivering, and where can you make the links and make it visible from those perspectives? We’re not wanting to make forced links and we’re really wanting to make authentic links, but we’re also wanting to make sure that at the heart of what you’re doing is the curriculum that needs to be delivered in the schools. And so that’s why it’s a cross-curriculum priority to include these perspectives within all curriculum areas.

So, for the special school settings, I would certainly, again, start with the Level A-D curriculum if that’s where your students are situated, depending on age. And think about the same...using the similar resources and the same themes, as to how you can make some of these things visible, dependent on the curriculum that you...that you are delivering in your schools as well. So, there’s certainly textual, there’s games, there’s toys. The artefacts and tools are really useful in terms of...or seasons or experiences, wet and cold. There’s certainly, I think, curriculum links at Level A-D that you’ll be able to access to make Aboriginal perspectives visible within that curriculum that you’re delivering. And then, you know, sorting through some of the resources and finding them.

I didn’t really touch on the ACARA Science Elaborations, but they go from Foundation to Year 10, and then you can certainly follow those themes through biological, chemical and physical sciences, and you’ll be able to map those to the Victorian curriculum Level A-D as well.

And it’s the same as STEM. When we’re talking about STEM, we’re not talking about additional curriculum on top of science, maths, design technologies, additional technologies. We’re talking about delivering it in an integrated way that makes the links visible, the same as Aboriginal perspectives as well.

Because otherwise, it can be overwhelming. Or you want to do it all, but you can’t do it all. (LAUGHS) Which Zeta and I have had conversations about many times. “I want to include this! What else can we include?” You know, and Vaso too. Where do you...where do you...where do you start?

**Craig Smith:** As always, I’m conscious of our time. We do have a couple more questions. This one’s from Madeliss. Madeliss writes, “I’m a teacher at Berendale School and once I taught seasons and included the Aboriginal cultures and how they described the seasons. Does this exist in maths?” And again, Erin, I’ll get you to kick off and then if anyone else wants to chime in, please do so.

**Erin Wilson:** Certainly, Craig. Now, I’ve got my curriculum open, but, you know, on the top of my head, I can’t remember where knowledge of calendars is in the maths curriculum. But any time you’re talking about time and space and months and days, you certainly can... I think it’s a great opportunity to be able to talk about what we mean by months, days, calendars. And as I said, the Judaeo perspective of that being 12 seasons versus the six seasons or the seven seasons that Koorie people have traditionally, or who now still observe in terms of the change of those seasons as well, too.

So, that’s a good example again, as well, of how you can integrate different perspectives when we’re talking about science inquiry skills. And I know there was a question about different ways of knowing. And so they really are ways of taking either a science...taking a Western approach or taking an Indigenous approach to observable phenomena and explaining both, equally valid from different perspectives, as well. So, I would certainly do that. Wherever you’re talking about months, days, calendars and seasons, you have the potential to be able to link in the Aboriginal perspective.

And someone has also shared the Indigenous Weather Knowledge on the Bureau of Meteorology, and the CSIRO Indigenous calendars. And so that’s where they’re useful, and it’s useful, again, if you’re thinking about Australia, and you might be doing a unit looking at Australia-wide context. And, so, there again, you might talk about how different Aboriginal people or Torres Strait Islander people in the north of Australia versus the south of Australia observe those calendars. But from my perspective, I started with the Kulin Nations calendar because that’s the local context that I’m...in.

And, Craig, what I might do is, if I can get...if we can copy the chat, we could actually update the PowerPoint presentation with some of these extra links as well, later on. That might be useful.

**Craig Smith:** Yes, of course we can. And just while we’re on that, we’ve had a number of questions around “Where do I find a copy of the session, the PowerPoint and such?” The VCAA, what we do is we...we send the session away to be transcribed. It’s part of our...one of our obligations to make sure that all our material is available to everyone, including people who may be deaf or have some other access issues. There’s normally a turnaround between five and seven working days. As part of that, it does give us an opportunity to add any additional things onto the PowerPoint. So, what we will release on the VCAA website, under the F-10 Curriculum, just follow the links through to the professional learning page. We will add an enhanced version of this PowerPoint slide. We’ll incorporate some of the additional resources that have been suggested or mentioned here this afternoon. So, thank you for your suggestions and comments. They’re much appreciated, and we’re very happy to, as I say, incorporate them where it’s appropriate in the PowerPoint presentation.

**Erin Wilson:** Now, Craig, we’ve got one last question that I think perhaps Zeta or Vaso might want to touch, and it says, “As a non-Indigenous person, I feel unqualified simply of who I am.” And so, you know, what’s the advice in terms of how you approach the topics or how you would incorporate Aboriginal perspectives from that perspective as well?

**Vaso Elefsiniotis:** Well, I say invite that cultural knowledge in.

**Erin Wilson:** Mm.

**Vaso Elefsiniotis:** Make those connections. Bring those... You know, I’m not...we’re not sure, sort of, who’s attending today, who was attending yesterday and the day before. So, you know, on Monday, Zeta, I think, was the one who’d mentioned, you’re not expected, as teachers, I think, to be the experts on everything. And you’re certainly not expected to be experts on Aboriginal cultural knowledge and...when you’re non-Aboriginal. And also Zeta, Fay will agree, you know, any expertise is around your own group as well. And so, the best way is to invite that expertise in and co-teach. And keep in mind, also, that that might sometimes require a little bit of a budget. People aren’t sitting around just waiting to be invited to come in and share knowledge, although many, many can. But just like you might have an in-service, and that may come at a bit of a cost, or an excursion. I think it’s important to consider that. But most definitely make those connections.

You can ring any of us. You can ring Zeta. You can ring Aunty Fay. You can ring myself. We can try and help connect you. As we talked before, LAECGs – Local Aboriginal Education Consultative Groups – can assist.

But I think...now, we never said this at the start, what our backgrounds are. I’m not a teacher, but I have been around education long enough to say I think that your role as teachers is to engage your learners and to develop interesting lessons and to go through curriculum. So how best to do that? Do that with the experts who can come in.

And by all means, look at the resources that are being developed for ideas and for planning. But make those connections, particularly as the questioner was from a non-Indigenous perspective. Be creative and be inclusive. What do you think, Aunty Fay?

**Aunty Fay Muir:** Yeah, I think that that’s true too, Vaso. When you’re not Indigenous, you’re also going on a journey of learning with your students at the same time. So, that’s really, really important too.

**Craig Smith:** OK, Zeta, I’m going to throw to you to wrap up the session today.

**Zeta Wilson:** Thank you, Craig. I just want to say thank you to the panellists, and Erin too for participating today. Of course, you do find it informative. Just want to just let people know, too, that tomorrow, if you would like to know about humanities, humanities will be tomorrow for Thursday, from 3:45 to 4:45. And then, next week will be the following, we’ll be looking at, then, the secondary sector. So, thank you for attending this webinar. That’s it. Thank you.

**Craig Smith:** Thank you, and goodnight, everyone.

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