**Craig Smith:** Hello. Good afternoon, everyone. My name’s Craig Smith. I’m the Unit Manager here at the F-10 unit for VCAA. It’s my great pleasure this afternoon to welcome you to the second in our series on bushfire education, this one focusing on specifically Foundation to Level 8 Geography and Science and the bushfire education resources. Before I start and introduce you to our panellists and the people who will be presenting this afternoon, I want to start with an acknowledgement of country, especially given today it’s the third day, fourth day in NAIDOC Week, which is the celebration of Australia’s first peoples.

We are all joining today’s session from across Victoria, and I would like to acknowledge the traditional custodians of the many lands across Victoria on which each of you are living, learning and working from today. For myself and those of us in the metropolitan area, we acknowledge the traditional custodians of the Kulin Nations.

Sorry – I just lost my place there.

The Wurundjeri call this place Naarm. We call it Melbourne. When acknowledging country, we recognise Aboriginal and Torres Strait Islander people’s spiritual and cultural connection to country. We acknowledge the continued care of the lands and waterways over generations and celebrate the continuation of a living culture that has had a unique role in this region. And as we share our knowledge and teaching and learning, may we pay our respects to elders past, present and emerging, for they hold the memories, traditions, culture and hopes of all Aboriginal and Torres Strait Islander peoples across the nation, and hope they will walk with us on our journey.

Today’s session will cover the Bushfire Education website and the new resources, and in particular, we’ll go a bit deeper into opportunities for bushfire education through the F-8 Geography and Science curricula. Our panellists this afternoon, or presenters – we have Leonie Brown, who is the Geography Curriculum Manager for VCAA, and Erin Wilson, who’s the Curriculum Manager for the science and STEM areas.

Before I hand over to my fellow colleagues from the VCAA, just a quick run through or introduction to the VCAA’s Bushfire Education website. This website has been around since 2011 in various iterations. It came into being through recommendation 6 from the royal commission into the Black Saturday fires in 2009. It’s gone through several iterations, the most recent being this year, where we’ve updated the content and the navigation structure. Currently, it has around 49 individual lesson plans.

The way it’s organised is around the four internationally recognised themes of disaster education, which are the themes of learning about, preparing for, responding to and recovering from, and in our particular instance, these are all linked to the notions of bushfire and bushfire education.

It’s organised around the four themes, then each theme is addressed at four different levels of schooling. So we have the early years, which is very much pitched towards children from the ages of four to five, and it’s also suitable for the first year of Prep, or first year of schooling here in Victoria. The outcomes are against the Victorian Early Years and Development Framework, or the VEYLDF outcomes, as opposed to the curriculum. The next level down is for lower primary. These are materials that are suitable, in the VCAA’s opinion, from, essentially, Foundation, or Level 1, through to about Level 4. Most of the curriculum material align to Levels 1-2 of the curriculum. Then we have upper primary, which is...again, has a broader range than just the curriculum levels suggest. So, really it’s from Grade or Year 3-4 through to Year 6 – or Grade 6 in the old language, and again, the curriculum areas typically will be across a two-level band. Because the way the curriculum is a continuum of learning, it’s relatively easy, I would suggest, for a teacher to adapt these resources, depending on your particular cohort of students. And the final level of schooling we have, it’s secondary, and the curriculum levels typically focus on Levels 7 and 8 of the curriculum, but again, with some modification, they are suitable for years 9 and 10 as well.

So, I’m going to throw over to our first presenter this afternoon, Leonie Brown.

**Erin Wilson:** I think Leonie’s going to give it to me. (LAUGHS) So, welcome, everybody. In recognition of NAIDOC Week, I would like to recognise the fact that I’m on Dja Dja Wurrung country, so I pay my respects to elders past, present and emerging.

And also recognising that my little patch on Dja Dja Wurrung country is in Woodend, so it’s very close to Mount Macedon, which was a significant site of the Ash Wednesday bushfires. So, in that context, the thing that I want to first of all consider is the various factors that will influence the way that your school, your class and your teachers will engage with the Bushfire Education website, and the resources that Craig has already given us an overview of.

We’ve put in the centre ‘Students’ background’, really to recognise that what the students bring to the classroom, in terms of their experiences relating to bushfires, is really one of the first considerations that we need to consider when we’re thinking about how we might engage with the particular resources that we use.

The other thing we might need to consider is also the time, both in terms of the time of year that you perhaps engage with the four...one of the four themes, or all of the four themes, but also the amount of time that you are dedicated to it, because, right now we are leading into bushfire season, and so some of the themes in terms of preparing for bushfires and planning for bushfires are particularly pertinent, perhaps, in the context that you’re in. And then, as we move to the end of the summer, it might be useful to think about recovering from bushfires, and that kind of perspective.

Your location, obviously, will have an influence. And Leonie’s in a different location to me in the state, and she’ll share that when she starts to present, and then Craig’s also urban as well. That doesn’t mean that we don’t all have an experience with bushfires or a need to understand bushfires, because we travel around the state, particularly coming up to the next summer, when Victorians are being encouraged to travel regionally and holiday at home. It really becomes important for you to think about your school’s community as well. So, you know, where in your...even if your community is urban, do you have students that are holidaying in urban areas? Do they have families that...family members that live in regional areas, and that sort of thing?

The other thing to consider also is the resources available to you. The webinar that we delivered last week had representation from Fire Rescue Victoria. So, if you are in an urban area, Fire Rescue Victoria is certainly a...other organisation that you might be able to engage with, whereas if you’re regionally, CFA, Forest Fire Management Victoria, and Parks Victoria are the organisations that you might be able to engage with as well.

The other thing that we do want you also to consider is your own teacher background. You know – what do you bring to the classroom? What experiences and knowledge do you also contribute in the way that you might design your teaching and learning program?

So, really what we’ve got is we have a...when we’re thinking about what your teaching and learning program might be in the school in terms of using the bushfire education program and engaging in the Victorian F-10 curriculum, there is the potential for distress – distress of individual students, but also distress of school communities. So what we do really encourage you, when you’re thinking about your school’s teaching and learning program is to, in the context of these factors – these six factors that might influence the way that you engage and develop your program – to consider the things that are most appropriate for your students, communities and context, and really to adapt and suit them to your particular environment.

As Craig has said, they’re arranged in four themes, and they’re arranged in lessons that are designated to particular levels within the curriculum, but you can certainly adapt those to suit your needs and your environment as well. And we would really... First and foremost, when you’re considering your students’ background and getting to know your students in terms of the way that you might develop the curriculum and assess...the teaching and learning program, is to involve your school’s wellbeing team. So involve your leadership - make it very well aware and known that this is the kind of thing that you’re planning for your particular team or year level, and also provide early notification to parents and carers, because that then allows that dialogue at home to occur. And if there’s any information that you need to know in terms of personal experience that your students may have had in relation to bushfires, that can be known early on.

What we’re going to do for the next little part of the webinar is we’re going to explore each of the four themes, and we’re going to look at it first of all from a progression of learning or an opportunity for you to consider how you might progress some of the themes in relation to Science and Geography, and then we’re also going to do a bit more of a deeper exploration into some lesson plans, so that you can begin to get an idea of the type of things that are available through the resources. If you haven’t yet visited the lesson plans before or if you have had experience with them previously, then it might just also remind you or provide you with some more opportunities to consider as well.

So, when you go to the website, you’ll see the ‘Learning about bushfires’ tile and then you’ll see that you can choose the different levels, as Craig has already explained. I’ve chosen here to go to the Secondary tile for ‘Learning about bushfires’, and you’ll see that there’s an overview, there’s some information provided in terms of curriculum areas, and then there is each of the lesson plans that are available there as well.

If I’m thinking about...now, what I’ve done here is I’ve just chosen to look specifically at lesson plans that relate to Science, OK? So, if we’re looking at the lower primary, we’ve got the ‘Introducing the Fire Triangle’ and ‘The impact of radiant heat’. They, as Craig has said, are both aligned to the Foundation to Level 2 achievement standards, so they could really be delivered, depending on your classroom, from Prep to 2 and above. We’ve got ‘The fire triangle and exploring what a fire needs to burn’ – so you can see that there’s a little bit of...there’s a progression in terms of an introduction to the fire triangle and then more of a deeper explanation as well. Levels 7 and 8 again just looks...again looks at the fire triangle. But you’ll notice that as we’ve done here... And I’m sorry – you’ll be able to see them better when the slides are shared with you after the presentation. But you can see that we’ve colour-coded the progression in terms of conceptual understanding, but then also the topic.

So, while each of the lessons across lower primary to secondary look at and explore the fire triangle, there are different activities and different focuses that students are asked to do in relation to those concepts, OK? So, the first one, ‘Introducing the Fire Triangle’, really is looking at science as a human endeavour, in terms of how people use science in their daily lives to understand and respond to bushfires. And then we’re looking at the physical sciences, in terms of changes made to materials, and then also energy as well. And the different activities that are included in each of the lesson plans respond to the different level of science inquiry skills that the students are asked to do. So, they are investigations – they pose their own questions. And the Level 5 and 6 lesson plan relating to the fire triangle, whereas in Level 7 and 8, they also identify questions, problems and claims.

So I really encourage you to have a think again, also, in terms of the impact of radiant heat versus a progression to heat transfer at Level 7 and 8 to understand how you might also be able to adapt them. Because, as Craig has said, while the middle to upper primary lesson plans are aligned to Science Level 5 and 6, you could easily adapt those to suit the Level 3 and 4 achievement standards and content descriptions, because when we look at Science Level 3 and 4, we’ve got, “Science knowledge helps people to understand the effect of their actions” under ‘Science as a human endeavour’, and then also in terms of the physical sciences, we’ve got, “Heat can be produced in many ways and can move from one object to another”. So that is then an opportunity also to think about a progression from the impact of radiant heat to also heat transfer as well.

So, that’s just a little bit of an overview to give you an understanding of the progression of learning across the different levels of schooling in relation to one of our...the first theme – so, theme 1. What I’m going to do is I’m going to give it to Leonie now, who’s going to give a bit of a deeper explanation around theme 2.

**Leonie Brown:** Thank you very much, Erin. Good afternoon, everyone. My name’s Leonie Brown, and I’m the Humanities Curriculum Manager at the VCAA. In this particular session, my Humanities hat is confined to Geography, which is probably my first love, but we don’t need to go into that.

So can I, first of all, acknowledge the lands on which I am speaking to you from and presenting from today, and they are the lands of the Wathaurong people. And for those of you who don’t know regional Victoria, that means, basically, Ballarat to the western margin of that particular people. So I’d like to pay respects to their elders past, present and emerging.

And I’d also like to say that even though in my lifetime of living here on our property, I’m very much experienced bushfires in that the Linton fire burned within about 400 metres of where I’m sitting today, and so we had a very close-up and personal encounter with a bushfire. But historically, with Indigenous perspectives particularly, this area would have been an area that was very much affected, but also very much managed by those people in that sense. So it’s very appropriate that we’re covering particular areas in terms of Craig’s looking from an urban perspective, Erin’s in a proximity that’s very close to Mount Macedon, and I’m very close to where the Linton bushfire was, actually there.

So, in the second theme, which is ‘Preparing for bushfires’, I’ve chosen to actually take you through how you would actually unpack this resource. So in doing so, you might have some questions, so could I just remind you that, as we go through, could you please put your questions into the chat session? We have allocated time at the end of today’s presentation where Craig is going to chair a Q&A. So, please, as we go through, you may have some questions from Erin’s presentation, or mine, or both, from here on in, so please just jot them down into the chat. and we can deal with them there and then. So, that’s a better way of managing it, rather than trying to respond to people as we go through. So could you please just put that in the chat?

So, again, theme number two. In terms of...preparing for bushfires. So, I too have chosen Secondary for my particular example, and that’s not to say that...it doesn’t actually mean that you shouldn’t consider what has been previously taught. So, this is what I call the Secondary...and it’s a landing page in that ‘Preparing for bushfires’. So, I just want to talk you through what that page actually has. At the top left-hand corner here are the three...sorry, the four themes. The three non-highlighted ones are the ones that are not relevant to this particular session, because I’m dealing with ‘Preparing for bushfires’ here, So it’s got the purple theme, and it’s the second one there.

In this front and centre part here, this is a brief overview of what that actually entails. So, this section employs the theme of preparing bushfires, designed for students Years 7 to 10. It’s directly related to the Victorian curriculum 7 to 8 in that sense. And they learn about the risk of bushfires and how to reduce them in order for them to begin to understand the risk of bushfires in their own area, and they explore how bushfire survival plans are developed, and their importance in preparing to respond to a bushfire. So this could well be a situation where they’re preparing for where they’re about to go on holiday or perhaps where they visit...quite often it could be relatives or other family friends. So it’s in that context that...one of the reasons why I chose this was it gives you the flexibility to cater for something that’s really relevant for students in your class, wherever you are in terms of physical location, whatever background they’ve got.

In the top right-hand corner is a list of the curriculum areas that are relevant to this particular theme and this particular aspect - so it’s Critical and Creative Thinking, English, and Geography.

So, down in...the bottom centre part is where you’ve got – this is part of a subtitle – knowing the risks, and it gives you a brief overview with a learning intention. Then, in blue down the bottom, is a hyperlink for where you would actually download the lesson plan.

Over here on the right-hand side, you’ll find this very important reminder that this potentially could cause discomfort through to distress for students. And it’s something that will certainly be front and centre in your planning. But can I also remind you that this is something that you need to monitor as you go through your delivery of this particular content. Because, certainly, this is a classic example of where you will develop a stronger and a deeper knowledge of your students’ background, in terms of perhaps their personal background, but also from their families, because there are so many instances where there’s connections between families and their experience of bushfires. So in that sense, could I please draw your attention to that note that you’ll find on every single page of the website? So be mindful of that, in terms of... Yeah.

So, to move on to the actual lesson plan, the lesson plan I’ve chosen, as I’ve said, is Secondary, so it’s 7 and 8, and it’s also Geography. It goes over a guideline of approximately 50 minutes times two, so it’s two lessons. I look at this and think that it immediately may be more than that, but again, this is just an idea for you – it’s a resource that you can visit and inform your teaching and learning program. You can take it holus-bolus, or you can actually pick parts out that, again, fit your particular context – your classroom, your experience, your comfort level – and the same with your students.

So, it has a very common structure, in terms of the learning intention said here – that this is...residents in high fire-risk areas throughout Victoria are identified, and they develop a bushfire survival plan. And this is something that I know, from personal experience, students really enjoy doing. That’s another reason why I’ve chosen it for my example. It gives you suggested resources. So, these are resources that ideally you have at your beck and call – so, an interactive whiteboard and so forth.

And then the next part of it goes through to actually, “How could you start this?” So, in terms of structuring your teaching and learning program, you may well say, “Well, what is this concept of fire? What is it all about?” So, before you even kick off in this particular thing, you may choose to go back and actually link it to something like Erin just referred to, when she spoke of the fire triangle and so forth. So, this is where you can incorporate whatever aspects of the resources that you see best fit your particular classroom environment.

So, this ‘Exploring’ unit goes through who’s responsible, and actions, so it’s very much a proactive thing that’s designed to empower students’ knowledge of what should they do, where can they go to get resources, and so forth.

Down the bottom of this particular page, there are five key points here, and sometimes people find it difficult and say, “Where’s the geography in all of this?” So, I would say, if you were looking at these five points – local vegetation and topography, fire and weather potential, local types of fires and fire events, family circumstances and priorities, where people live in terms of that, and peculiarities or specialties of house design and so forth – they’re all very geographical in their essence. So, that is something very much that students really like to not just explore, but actually use in their learning and adapt their particular circumstance to it.

The final part of this particular lesson plan is an option of putting it all together in terms of actually designing a...a bushfire survival plan, and there’s plenty of resources there for you to go through when you’re doing that. It also gives you an idea of how that could be an extension, where you get the students to actually develop their own emergency kit. And this is where you would encourage students to be very specific about the particular locations that they’re talking about. So, you can’t get anything more geographic than if you’re looking at that particular location.

I’d just like to give a plug – and it’s a really worthwhile plug, I think - to a series that has been recently shown on the ABC. So, last week was the last episode, and to me, this is the one that could be really relevant to you and your planning here. So, it’s episode 3 of Big Weather (and how to survive it). There’s actually times where it’s responding to fire and to floods, and in that sense, it actually goes through and gives a couple of scenarios of different families in different geographical contexts, both in bushfire-prone areas, but it actually just takes it through the family of...packing up the chooks and the snake and packing up the bike and their favourite boxes with all of their kits and so forth. So it’s something you could use by accessing it through iview, but you could certainly use whatever portions of it... You could actually go through and parallel the sorts of decision-making that’s involved in this particular lesson plan.

There’s something else that I would really like to point out to you at this stage, seeing that you’ve got here, that’s responding to fire and to floods. In your planning, you may find that the resources here on the Bushfire Education website is not something that you wish to pursue, because of your circumstances, the background of your students and so forth. For me, I’m putting my Geography hat on here in terms of saying that you could actually do that in terms of from a flood perspective – so, this is the geomorphological hazard of a flood, and this particular episode has some fantastic footage of how they simulate responding in a flood situation, including a vehicle stuck in... in an actual ravaged stream and so forth. So it’s where you could, if you wanted to, extend, and go into another hazard rather than it just being fire.

But on that sense, on that point, I’d like to actually hand over to Erin, where she’ll go through into theme 3.

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