UNIT ON NATURAL DISASTERS



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THE IMPACT OF, PREPARING FOR, RECOVERING FROM AND MANAGING SUCH DISASTERS

RATIONALE

Why teach about natural disasters (in particular bushfires)?

From bushfires on our doorsteps to cyclones in Oklahoma, from floods in Queensland to tsunamis in Japan, primary students are likely to have seen images on television and in newspapers of recent natural disasters and their devastating impacts on tens of thousands of people.

With around 400 natural disasters reported globally each year (Centre for Research on the Epidemiology of Disasters (2009)), some students may even have experienced first-hand the impacts of natural disasters.

A natural disaster is the consequence or effect of a natural, hazardous event, occurring when human activities and natural phenomenon (a physical event, such as a volcanic eruption, earthquake, hurricane, tsunami, landslide, etc.) become enmeshed (Scripps Institution of Oceanography, n.d.). "Natural disasters result in catastrophic consequences for living things in the vicinity" (para. 1). Whether a natural process becomes a disaster depends ultimately on its location (Smith, 2006). Smith explains that "a large earthquake in the Hindu Kush may spawn no disaster whatsoever while the same intensity event in California could be a catastrophe" (para. 2).

As the world's population rises above seven billion (US Department of Commerce, 2013), and the population density continues to increase, including in disaster-prone areas (such as river valleys, coastal strips, along fault lines and adjoining bush land), it is important that students - the decision makers of tomorrow - understand the power and occurrence of significant natural processes. This is particularly true as our continent warms and the occurrence of some natural processes appears to increase.

It is also important that they understand what turns such natural processes into natural disasters. They need to have a feel for the kinds of preparations that need to be made to limit natural disasters, as well as the decisions that need to be taken when locating populations into the future, when developing areas, setting building codes, or managing environments.

In Victoria, a bushfire prone area, such knowledge will be particularly valuable to these students who may find themselves one day needing to prepare for, or manage, a natural disaster.

The importance of understanding the natural processes that operate across Australia (for example, rainfall, drought, flood, earthquake, cyclones and bushfires) is stressed in the Humanities (geography) domain of the AusVELS curriculum (Victorian Curriculum and Assessment Authority, 2013a). The curriculum for years five and six also requires students to look at how people react to these natural processes, "including their preparation for, and management of, natural disasters" (VCAA, p. 6).

This unit of work attempts to address this. It starts with students being introduced to and brainstorming a number of significant natural processes operating across Australia, before focusing in specifically on bushfires and the Black Saturday events which occurred in the lifetime, and on the doorstep, of current Victorian students.

The unit explores the impact of fire, and the Black Saturday fires specifically, on lives, ecosystems and communities. It takes Marysville as a case study, looking at how the people of this community have reacted to the disastrous fire of 2009 and rebuilt. It considers the range of community organisations which have helped this town on its path to regeneration, and focuses on developing awareness around the reasons why community

organisations are such important recovery tools. The unit goes on to look at how communities prepare for bushfire, as well as at some of the big management issues these fires present.

It concludes with students taking action, informing others in their school communities about bushfires and the dangers they present, and organising a fundraiser for the children still struggling in bushfire-affected communities.

PEDAGOGICAL APPROACHES

We felt this unit on natural disasters, and bushfires more specifically, naturally lent itself to Inquiry Learning and a Constructivist approach. We have also allowed for differentiated learning needs and Multiple Intelligences.

Inquiry Learning, explains Wilson and Murdoch (2004), involves students forming their own questions about a topic and having time to explore the answers. Right from the outset of this unit, students are challenged to come up with, and explore, their own questions on natural disasters. This model of getting the students to pose and explore questions of their own will be continued throughout the unit and will likely shape the direction the unit takes. The class blog (http://kidblog.org/JSAR/, sign in as student, password abc) is seen as a perfect place for students to share their research, insights, ideas and thoughts, and to explore answers to their own questions. They will be given class time to explore the blog and research their own answers. As such, the unit –the research undertaken and the direction it takes - will be, to a point, student directed.

Where questions are asked of the students, attempts have been made to include open-ended questions that inspire creative thinking strategies in the students and seek broad conceptual responses. These types of questions lend themselves to a diversity of responses.

In inquiry learning, says Wilson and Murdoch (2004), students are both problem posers and problem solvers. Throughout this unit, students are challenged to find their own answers to questions, but also to come up with their own initiatives, from a fire safety public awareness campaign to a fundraiser for students still struggling four years after Black Saturday from PTSD (Post Traumatic Stress Disorder), as well as initiating new ideas for community projects or organisations that might generate additional support for such students.

Through this unit, students will begin to appreciate the complexities of the world. They will hear, for example, how fire is a very important part of the Australian landscape, crucial for regenerating the environment, but also a huge threat to communities. They will hear how staying to protect one's property or going in a bushfire is a difficult decision, with no absolute right or wrong answer, while they are likely to hear about the controversies surrounding rebuilding in bushfire prone areas. On a more personal level, students will become more aware of the emotional symptoms and challenging realities still facing students living in Black Saturday fire affected areas.

Throughout this unit, students will be offered experiences which will help them gather information and make meaning. The visit to Marysville is likely to be a particularly moving and real experience. They will be given multiple opportunities to demonstrate their learning (orally, in writing, in art form, in a variety of ICT languages and through devising a campaign) and to apply what they are learning. The unit emphasises skill, exploration, engaged group discovery processes, open-ended investigations, creative reflections and problem solving outcomes rather than simple information development.

Wilson and Murdoch (2004) suggest, "the inquiry process has the potential to develop skills and dispositions for lifelong learning, for example, independence, thinking skills, confidence, decision making, cooperative learning and other life skills (para. 4)". We very much believe this unit will help develop students' independence (from actively posing questions and challenges, researching answers and posting them on the blog to coming up with their own fundraising campaign), cooperative skills (as students work in pairs, groups and as a whole class), confidence (in their abilities to devise a public awareness campaign) and thinking skills. Please refer to the Unit overview (page 8) where specific activities, outcomes and assessment strategies are outlined to cater for each stage of the Inquiry process.

While basing our teaching methodology on the inquiry learning and constructivist models, we have attempted to incorporate differentiated instructional strategies in the unit, to provide students with different avenues through which to acquire content and construct meanings. Gardner's Multiple Intelligences provided the framework for doing this.

Gardner's theory of Multiple Intelligences (1993) suggests people possess a range of intelligences. He identifies these intelligences as verbal/linguistic, logical/mathematical, visual/spatial, musical/rhythmic, interpersonal, intrapersonal, kinaesthetic, naturalist and existential.

We have, in this unit, attempted to set tasks which appeal to students with different intelligences. For example, we vary between individual and group work appealing to those who are intrapersonal and interpersonal learners. In lesson 9, we encourage students to reflect on and show their learnings using a variety of methods. Those who are visual/ spatial learners, may choose to produce an art work inspired by the unit, or a new media presentation. Those who are more verbal/ linguistic, might choose to write a creative or reflective piece or present a radio interview. In lesson 5 (the excursion), students participate in a walk to and around Steveanson Falls, thus catering for kinaesthetic and naturalist intelligences, who will get the chance to see how plants and animals survived the fires (developed in lesson 6).

This Unit incorporates a diversity of approaches to teaching pedagogy including experiences, investigations and discovery opportunities for all learners. We hope students will remain engaged and inspired, and ultimately curious, to continue learning about the relevance and global and local significance of natural disasters.

ASSESSMENT AND EVALUATION

Each lesson within this unit offers formative assessment opportunities. These allow the teacher to track students' developing understanding of key concepts, and to focus teaching accordingly. Formative assessment will include:

- teacher observations
- teacher questioning
- group engagement and discussion
- entries in a the class blog that each student will maintain throughout the unit
- student-teacher conferencing

The class blog and inquiry books are particularly valuable tools for assessing learning, and are an important part of this unit.

Some lessons also offer diagnostic assessment opportunities. Teacher questioning and class discussion will focus on revealing students' prior knowledge, including any misconceptions they hold about natural disasters, the nature of bushfires, impact and management of bushfires. In Lesson 9, students will also have an opportunity to reflect on their learning during the unit.

The final lesson, the Taking Action component, will offer summative assessment opportunities. In groups of 3-4, students will bring together the ideas developed throughout the inquiry unit and use these ideas to create a public awareness campaign. They will present this campaign to a relevant audience in one of several forms e.g creating a claymation, scripting and acting out an advertisement, designing graphic panels, artwork, comics, cartoons, illustrations, diorama, maps, writing jingles, poems, interpretive signage and publications, formal presentations using PowerPoint, Prezi, Glogster etc. As they work to complete the task, students monitor their work to ensure that it demonstrates the required skills, knowledge or understanding using the assessment rubric.

Teachers will provide feedback using the same rubric. In addition to teacher's feedback, students will also get a chance to reflect on their work. Reflecting on their achievements is important as they can see where they think they did well; identify strengths and recognise areas for improvement. Students can then set goals for future assessment tasks. (Department of Education and Early Childhood Development, 2012).

LINKS TO AUSVELS

The lessons in this unit are linked to AusVELS, the curriculum for Victorian government and Catholic schools. More specifically, they are linked to the following content descriptor for Year 6 Humanities - Geography (Victorian Curriculum and Assessment Authority, 2013a, p. 6):

"investigate some of the significant natural processes that operate across Australia (for example, rainfall, drought, flood, earthquake, cyclones and bushfire), and how people react to them, including their preparation for, and management of, natural disasters."

Many lessons also cover aspects of other discipline-based learning domains, namely English and The Arts. The essential knowledge, skills and behaviours students are expected to demonstrate within this unit include teamwork, building social relationships, communicating, constructing meaning, and conveying information and understanding to others in a range of ways and a variety of settings. Students will also validate existing knowledge, create new knowledge, build ideas and make connections between them through processing, reflecting and evaluating information.

(See individual Lesson Plans for a more comprehensive breakdown of the various domains addressed within a particular lesson).

UNIT OVERVIEW (LESSON SUMMARY)

Lessons 1, 4, 5, 7 and 8 are described in detail in the lesson plans section. Lesson 11 is the overall unit assessment. Summaries of lessons 2, 3, 6, 9 and 10 can be found at appendix 1.

		LESSON OV	ERVIEW	
	STAGE OF INQUIRY	OUTCOMES Students will be able to:	ACTIVITIES Students will:	ASSESSMENT OPPORTUNITIES
Lesson 1 An Alphabet of Natural Disasters – from Avalanches to Volcanoes	 TUNING IN engage students in the topic discover prior knowledge and provide opportunities for students to share what they already know and believe about natural processes and disasters introduce and clarify the language of natural processes and disasters. 	identify various natural disasters across the globe, understand and respect the power of nature	 watch video clip on various natural disasters brainstorm ideas create mind map be introduced to the class blog explore Disaster Mapper construct a physical word wall 	Diagnostic assess students' prior knowledge of natural processes and disasters contributions to word wall Formative teachers' observations of student contributions during class discussions student wonderings monitor student contributions to mind map monitor students contributions to the blog

Lesson 2 Natural Disasters in Australia	 FINDING OUT / SORTING OUT use ICT skills and knowledge to collect new information from a range of websites organise, represent and present information on a map. 	 identify natural disasters affecting Australia identify bushfire as one type of natural disaster affecting Victoria 	 map natural disasters on a template using Disaster Mapper gather information about natural disasters in Australia 	 teachers' observations of student contributions during class discussions monitor students contributions to the blog accurate representation of natural disasters on the map with a brief description
Lesson 3 Fire to shape the Land	 locate and gather information from a range of sources – internet, journal articles, books further clarify or extend through questioning develop research and information literacy skills 	 identify indigenous perspectives on bushfires explore how fire was used in the past and still is by Indigenous people think critically about bushfires and their effect on the environment 	share their opinions on bushfire (is it just destructive or is it both beneficial and destructive) by creating a poem, narrative, picture storyboard etc.	 teachers' observations of student contributions during class discussions stance on fire clearly evident in the published creative piece

Lesson 4 Black Saturday	organise, represent and present information from bushfire history table using Google Maps and Dippity present information researched about Black Saturday in students' preferred way of learning eg. animation, news script, oral presentation, artwork etc.	 recognise the fact that bushfires have been occurring regularly since long before the arrival of European settlers in Australia develop a sound understanding of the nature of bushfires in Victoria discuss significance of Black Saturday bushfires 	 create mind map after viewing images of bushfires to activate prior knowledge construct a timeline of events (pre, during and post) for the Black Saturday bushfires answer a specific question relating to the Black Saturday bushfires and present their findings to the class plot frequency of bushfires on a graph to analyse data and discuss 	Diagnostic assess students' skills and prior knowledge on everything they have learnt so far about bushfires contributions to word wall Formative teachers' observations of student contributions during class discussions accuracy of timeline (dates and events) using Dippty monitor students contributions to the blog presentations assessed based on the clarity of presentations, accuracy of information and use of resources
Lesson 5 Community perspectives and bushfire management in Marysville (excursion)	• extend students' knowledge of bushfires, more specifically factors contributing to the spread of bushfires, its impact on local community and management of bushfire recovery.	 identify impact of bushfires on a local community (people, wildlife and environment) explain how different organisations help rebuild towns and manage bush fire recovery understand the stages of redevelopment of a town post bushfires 	 attend an excursion to Marysville engage in discussions following presentations from various organisations on their involvement in the containment of the Black Saturday bushfires and rebuilding of Marysville following the crisis students identify elements of regrowth near the Steveanson Falls. 	 Formative teachers' observations of student contributions during the excursion students reflect on the excursion

Lesson 6 Marysville reflection/ Bushfire Ecology	 GOING FURTHER consolidate learning from Marysville excursion broaden the unit - environmental impact identify & make connections – how do animals and plants in an ecosystem adapt after bushfire 	 investigate impact of bushfires on an ecosystem identify short, mid and long term impact on the environment 	 cite examples of bushfire recovery from the excursion create a pictorial timeline of recovery of Steveanson Falls following the Black Saturday bushfires Formative teachers' observations of student contributions during classroom discussions accuracy of timeline
Lesson 7 Bushfire preparedness and awareness	 SORTING OUT/GOING FURTHER identify possible fire hazards using examples from their own homes, their school and local area develop key messages about bushfire awareness in small groups. 	 identify and assess risk of students' own home and apply this knowledge broadly to properties in bushfire prone areas identify possible prevention measures to minimise loss communicate key messages about bushfire prevention and raise awareness 	 assess risk and identify prevention strategies to protect school/local area from bushfires using a T-chart students create slogans which highlight the importance of assessing fire risk and taking preventative measures to minimise loss. Diagnostic assess students' skills and prior knowledge about minimising bushfire risk to a property Formative provide opportunities for students to present or report upon their learning experiences and teacher provides informal feedback on their work
Lesson 8 Rebuilding communities affected by the Black Saturday bushfires	broaden the Unit by including information about the various community organisations and/or projects that have assisted in rebuilding communities affected by Black Saturday bush fires	 define what a community organisation is and does highlight the importance of the role local communities play, including the benefits and support provided by local community projects, in rebuilding towns following a 	 answer a set of questions on four community organisations and projects involved in rebuilding communities affected by Black Saturday research and design an imaginary youth Diagnostic assess prior knowledge of community organisations and projects using mind map Formative teachers' observations of student contributions during classroom discussions students record their response to the set of

	• students make connections by either designing their own community project or by creating a youth organisation that intends to provide further support for the youth affected by Black Saturday bushfires.	natural disaster such as a bush fire.	community organisation or project to inspire and support the youth affected by Black Saturday bushfires	 questions in their inquiry book groups choose how they intend to explain and represent their youth community organization or project to the class
Lesson 9 Moving on	• Students reflect on their learning by completing a questionnaire and use 2-3 key ideas/learnings from the Unit to create a personalised piece which reflects this learning	plan, design and create a piece of work that is unique to each student and incorporates key ideas/learning from the Unit	 reflect on learnings which occurred throughout the Unit by completing a brief questionnaire create and display their personalised pieces in a mock exhibition within their school as testament of their learning. 	student – teacher conferencing of ideas personalised piece reflects key understandings and is well presented
Lesson 10 How to create a fundraising initiative?	Students relate learning to real life situations by creating and implementing a fundraising campaign within their own school community	 discuss the importance of Smouldering Stumps campaign discuss the strengths and limitations of different fundraising initiatives create, plan and organise a fund raising campaign 	create and implement a fund raising campaign to support Smouldering Stumps	teachers' observations of student contributions during classroom discussions student - teacher conferencing within groups to clarify issues as required and assess whether students are on track with their plan.

Lesson 11	END OF UNIT	summarise key understandings	• create a campaign to raise	Summative
Public Awareness Campaign	Students relate learning to real life situations by creating campaign to raise awareness of bushfires within their own school community	 and ideas developed throughout the Unit create a plan for the campaign in their preferred learning style implement the plan self-evaluate their role in the group project 	awareness of bushfires within their own school community	campaign assessed using set criteria, namely accuracy of information, use of resources, effectives of campaign directed towards an appropriate audience, collaboration and fair allocation of tasks amongst members of the group.

LESSON PLANS



Lesson 1: Introduction to Unit on Natural Disasters

Title:	An Alphabet of Natural Disasters – from Avalanches to Volcanoes	Year level: 5/6	Class Size: 24
Topic and Focus:	What we mean by natural processes and natural disasters, examples of such events, focus in on Australia, the class blog	Inquiry learning stages	Tuning in

Learning Objectives:

- To introduce students to a range of significant natural processes, from avalanches to volcanoes, and to develop an appreciation of their power.
- To introduce students to the concept of natural disasters, where natural processes and human activity come together.
- To introduce students to the vocabulary of natural processes and natural disasters (including words such as tsunami, avalanche, pandemic).
- To introduce and explain how to use the class blog on natural disasters.
- To generate student questions.
- To focus in on natural disasters affecting Australia.

Concepts and Understandings:

- To develop a sound understanding of the range of natural processes affecting the world and Australia.
- To understand what makes a natural disaster.

Skills and Behaviours:

- Work constructively in pairs to brainstorm ideas.
- Contribute respectfully to class discussions about natural disasters, responding to the ideas of others.
- Identify the purpose and features of a mind map, construct a class mind map.
- Pose questions for investigation.
- Use and contribute to a class blog.

Values and Attitude:

• Respect and acknowledgment of others' ideas and contributions.

Understanding and respecting the power of nature.

AusVELS Strand Level:	Domains:	Key element of standards to which lesson is focused:
Level 5/6	The Humanities- geography	Students investigate some of the significant natural processes that operate across Australia (for example, rainfall, drought, flood, earthquake, cyclones and bushfire) (Victorian Curriculum and Assessment Authority, 2013a)
	ICT	Students learn to use tools, such as database software and graphic organisers, to organise and analyse data and information (Victorian Curriculum and Assessment Authority, 2013b).
	Communication	Students begin to work in a collaborative global environment. They share their developing knowledge with their peers through email, and seek advice from others through frequently asked questions (FAQs), websites or by directly emailing experts. Students consider these methods of sharing information with a wider audience, and develop knowledge of protocols for sending and receiving electronic information through the Internet by creating and sending emails with attachments and uploading files to protected public places on intranets or the Internet VCAA, 2013b).
		Students use their understanding of communication conventions to communicate effectively with peers and to respond appropriately when they are part of an audience; for example, by waiting for the communication of others to be completed before responding. They practise listening attentively to identify and communicate main points to others (VCAA, 2013c).

Assessment Strategies:

- Pairs' brainstorm, class discussion and mind map contributions all provide evidence of prior knowledge.
- Constructing the word wall at the end of the class and the meanings given by students to terms will help measure whether appropriate learning has taken place.
- Individuals' contributions to the class blog will be an on-going way for the teacher to assess individual student participation in, and understanding of, the unit.

Students Background Knowledge:

• Students' prior knowledge of natural disasters will be explored in the brainstorm activities and as the mind map is created.

Resources and Materials:

• Large screen to show video and website, white board for creating mind map, kidblog account already set up (http://kidblog.org/JSAR/); to access login as: student, password: abc).

Introduction

Play first 2.5 minutes of ill318, 2011 (http://www.youtube.com/watch?v= or11wRt-10)s a tuning in activity. This video provides dramatic footage of natural disasters and reveals their frequency.

Ask students what they thought of video. What struck them as the most powerful natural process, were they struck by the frequency/ range of natural disasters?

Teacher introduces the new unit on natural disasters. Asks what is meant by a natural disaster. The Scripps Institution of Oceanography (n.d.) characterizes a natural disaster as the "consequence or effect of a natural, hazardous event, occurring when human activities and natural phenomenon (a physical event, such as a volcanic eruption, earthquake, hurricane, tsunami, landslide, etc.) become enmeshed. Natural disasters result in catastrophic consequences for living things in the vicinity" (para. 1). Stress difference between a natural process and a natural disaster. Whether it is a disaster depends on its impact on living things.

Main Body

In pairs, students brainstorm for 10 minutes what they know about natural disasters. Intention of this tuning-in activity is to engage students in the topic, discover what students already know, and find out about students' personal experiences. Teacher to circulate among students and stimulate thought/ ask questions, assess prior knowledge and misconceptions. As a start point, ask students to list the kinds of natural disasters/ processes they know and what each term means.

As a whole class, students to discuss pairs' brainstorm and help teacher bring these ideas together in the form of a whole class natural disasters mind map (example on page 19). Might include what makes a natural disaster, examples of natural disasters, what each term (eg. avalanche/ tsunami) means, what causes each natural disaster if known, where disasters occur in the world, which affect Australia, which famous natural disasters do they know (eg. Black Saturday, Queensland Floods), impacts of natural disasters (loss of life, injury, financial).

Teacher then asks students what questions they might have about disasters and their management. What kinds of questions would they like to explore (for example, are disasters becoming more common, what kinds of disasters affect Australia, are there particular regions of the world more prone to disasters, do we have appropriate responses to disasters, what's the most dangerous disaster, do we have adequate preparations for disasters, does climate change mean increased disasters into the future). Record these questions on the board. Will come back and add more questions as unit develops. These questions will help teacher in revising unit.

Teacher then introduces the idea of class blog for this unit of inquiry (see page 18, http://kidblog.org/JSAR/; to access login as: student, password: abc). Teacher puts mind map (either taking a photograph of whiteboard and uploading, or electronically) and student questions onto blog after class, with children asked to go on regularly and put links to articles they find on disasters (as well as the preparation for and management of disasters), provide answers to each others' unit questions, suggestions for how we can help in disasters etc. Intention of the blog is that it will be a place for students to share answers they find to their questions, pose further questions that their research elicits, share their research, add to the mind map, build up their research and knowledge of this topic. Teachers will be able to monitor students' individual

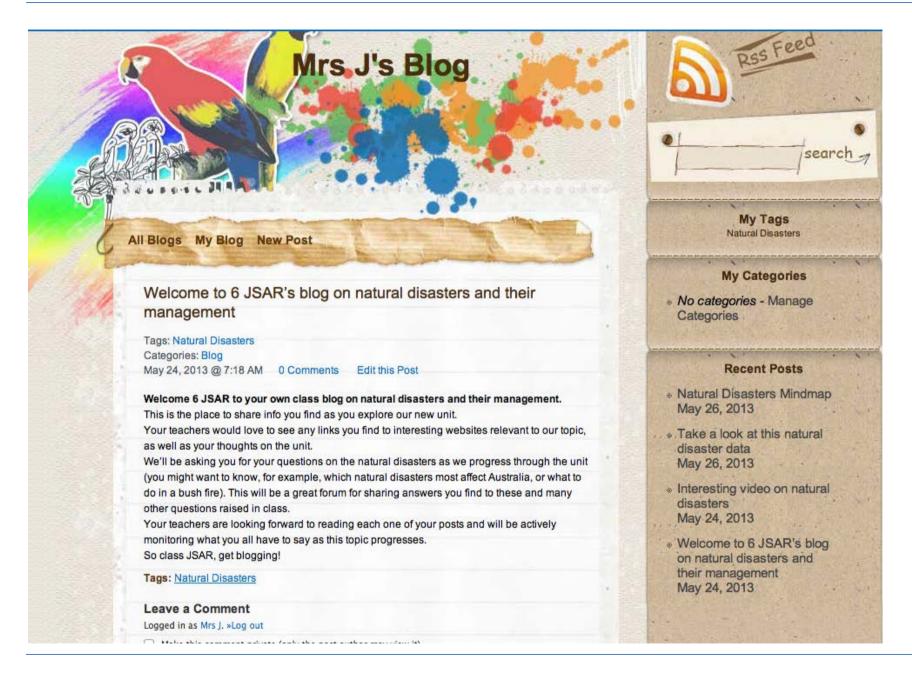
use of the website (are they posting) and must authorise all posts before they can be viewed. Demonstrate to students how to use the blog.

As required in Aus VELS, then focus in on natural processes/ disasters that operate across Australia. As a class, using computer and projector screen, link to Australian Government (2013), http://disastermapper.ema.edu.au/#/intro website. Discuss as a class what the website shows. Are there certain areas of Australia more prone to floods, heatwaves, bushfires? This will be the start of the finding out stage of inquiry.

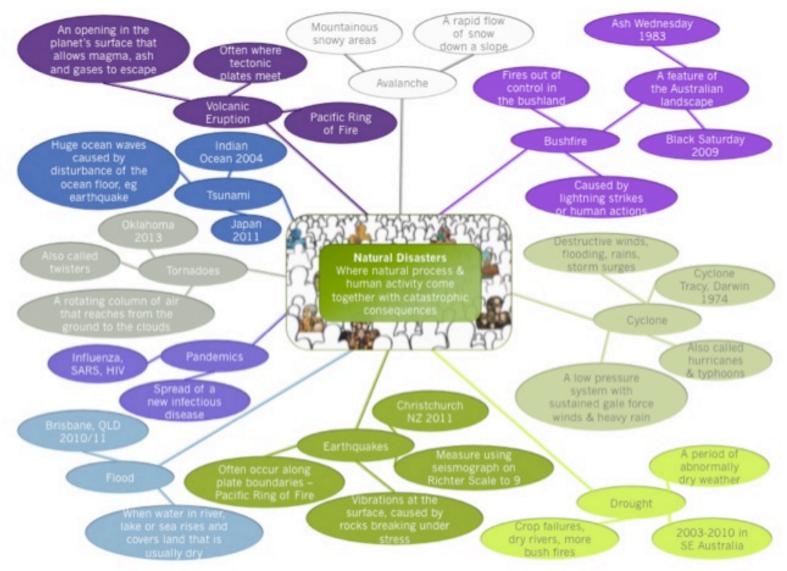
Students to work in pairs to explore this website further. Time could be allocated in class before the next inquiry lesson for students to explore this website and the blog.

Conclusion

To conclude and consolidate, the teacher revisits the vocabulary introduced in this class including natural disaster, cyclone, tsunami, pandemic, asking students to clarify meaning. A word wall is created for display in classroom with these terms and their meanings included.



Mind map of natural disasters:



This is one example of how the mind map may develop. It could also include the impacts of natural disasters (loss of life and injuries, economic losses and destruction of natural and man made environments), where disasters occur, frequency etc.



Lesson 4: Black Saturday

(Adapted from Victorian Curriculum and Assessment Authority, State Government of Victoria [2011a])

Title	Black Saturday	Year level: 5/6	Class Size: 24
Topic and Focus	Black Saturday fires – what, when, how, why?	Inquiry learning stages	Sorting out

Learning Objectives

- Students will learn that bushfires are not new and have occurred regularly since before recorded history in Victoria, although they have varied in severity.
- Students will increase their understanding and knowledge of bushfires in general.
- Students will increase their understanding of the Black Saturday bushfires by investigating a series of what, when, how, and why questions.

Concepts and Understandings

- To recognise the fact that bushfires have been occurring regularly since long before the arrival of European settlers in Australia
- To develop a sound understanding of the nature of bushfires in Victoria.

Skills and Behaviours

Students will:

- work collaboratively in a group
- read different types of texts for specific information
- develop strategies to record and organise information and ideas from more than one resource
- develop intellectual skills of reasoning, processing and inquiry, questioning, listening, reading, viewing, critical thinking, researching, seeking solutions, describing, analysing, and considering cause and effect
- refine researching and ICT skills
- use appropriate language to understand, develop and communicate ideas and information

Values and Attitude

- Students are self-motivated and confident in their approach to learning and are able to work individually and collaboratively
- Students interact with other members of the classroom in a respectful manner, value their opinions and contributions

	Domains:	Key element of standards to which lesson is focused:
		Learning Focus: students investigate some of the significant natural processes that operate across Australia i.e. bushfires. They search for and annotate relevant images from the Internet. They learn about and interpret their location relative to other places
AusVELS / The Australian Curriculum Strand Level:	The Humanities- Geography:	Geographic knowledge and understanding: students use geographic language to identify and describe the human and physical characteristics of local environments depicted by different kinds of maps, diagrams, photographs and satellite images. They learn about and interpret their location relative to other places Geospatial skills: students identify features from maps, satellite images. They use simple mapping conventions
5/6		such as title, scale, north point and legend. Learning focus: students experience a variety of aural, written and visual communication forms in both formal
		and informal settings; for example electronic communication, oral presentations etc. They begin to recognise the purpose of specialised language across the curriculum and to use this appropriately in their own communication. They develop their skills in organising ideas and information logically and clearly to suit their purpose and the needs of their audience.
	Communication	Listening, viewing and responding: when making meaning, students continue to develop skills in asking clarifying questions and seeking validation of their interpretations from their peers.
		Presenting: students ask clarifying questions about ideas and information they listen to and view. They develop interpretations of the content and provide reasons for them. They summarise and organise ideas and information, logically and clearly in a range of presentations.

English	Language: Students identify how analytical images like figures, tables, diagrams, maps and graphs contribute to our understanding of verbal information in factual texts (ACELA1524). They use comprehension strategies to interpret and analyse information and ideas, comparing content from a variety of textual sources including media and digital texts(ACELY1713). They create literary texts that adapt or combine aspects of texts students have experienced in innovative ways (ACELT1618). They plan, draft and publish imaginative, informative and persuasive texts, choosing and experimenting with text structures, language features, images and digital resources appropriate to purpose and audience (ACELY1714). They use a range of software, including word processing programs, learning new functions as required to create texts (ACELY1717).
	Literacy: Students participate in and contribute to discussions, clarifying and interrogating ideas, developing and supporting arguments, sharing and evaluating information, experiences and opinions (ACELY1709). They use interaction skills, varying conventions of spoken interactions such as voice volume, tone, pitch and pace, according to group size, formality of interaction and needs and expertise of the audience (ACELY1816). They plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis (ACELY1710).
Information and Communications Technology	ICT for creating: Students safely and independently use a range of skills, procedures, equipment and functions to process different data types and produce accurate and suitably formatted products to suit different purposes and audiences. ICT for communicating: Student successfully upload their work to a protected public online space ie. the class blog 'JSAR'. Using recommended search engines, students refine their search strategies to locate information quickly.
Interpersonal Development	Building social relationships: Students demonstrate, through their interactions in social situations, respect for a diverse range of people and groups. They accept and display empathy for the points of view and feelings of their peers and others. Working in teams: Students work effectively in different teams and take on a variety of roles to complete tasks of
Thinking processes	varying length and complexity. They work cooperatively to allocate tasks and develop timelines. Students accept responsibility for their role and tasks. Students make observations and pose questions about people and events within and beyond their own experience, and develop a growing awareness of the complexity of the world around them. Using these questions as a basis, students undertake investigations independently and with others.

Assessment Strategies

Students will create a mind map during the tuning in stage of the lesson and demonstrate their ability to identify and describe bushfires.

At the end of the lesson, students will present their wonderings on Black Saturday to the class and will be assessed on clarity of presentation, accuracy of information, and use of resources.

Students will also update the class blog after completing the set tasks.

Students' Background Knowledge

- In their Literacy sessions, students will be reading Bushfire by Elizabeth Mellor (2010) which is a fictional story about a child's experience of a bushfire and its aftermath.
- Students will have had opportunities, during the course of their schooling, to use Microsoft PowerPoint and other web tools such as Glogster, Prezi, Google Earth etc.

Materials and Resources

- Interactive White Board
- Computers
- Poster paper
- Various coloured pens
- Bushfires in our History, 1851 2009 (Victorian Curriculum and Assessment Authority, State Government of Victoria [2011b])
- Google Earth software
- Google Maps
- A3 map of Victoria
- YouTube Video: http://www.youtube.com/watch?v=UE3UvdyaFN0

Introduction

In this lesson students will draw out information from past lessons and brainstorm ideas that come to mind after viewing 'Bushfire Collage' (see page 26) on the IWB. Discuss this in groups of 4 and ask the groups to create a mind map either on paper or using an appropriate web tool e.g. Xmind, Edraw.

If required, teacher will guide the responses by asking the following questions:

- What do you see?
- What is happening in each of the photos? What do they show?
- Who has been affected?

- How did it start?
- What sorts of places are at high risk of bushfires?

Students will link their mind maps to the classroom blog and copies of their mind map will be pasted into their inquiry books.

Throughout this lesson, students are provided with opportunities to question and clarify any issues with their teacher as they arise.

Main Body

'Bushfires in our History, 1851-2009' (VCAA, 2011b) illustrates the regularity and severity of bushfires. Explain that the table only shows major fires after European settlers arrived in Victoria but that bushfires have been an important part of the Australian environment for about 30 million years.

Allow some time for students to study the table and suggest criteria that might be used to determine the severity of bushfires. Answers will probably include human deaths, financial cost and the physical extent of fire; other possible answers will include the time the fire took to extinguish, environmental damage, stock losses and damage to infrastructure etc. Students will plot the frequency of bushfires on a graph, analyse the data and discuss findings.

Using the severity criteria and prior knowledge from past lessons, students should be able identify the four 'major' Victorian bushfires in the table. Ask students to explore some of these locations on Google Earth. What do they notice? How does it compare to the area where you live? Students will note their observations in their inquiry book.

Students will then create a Google Map to show the location of the four 'major' Victorian bushfires in the table. Include photographs and video clips as appropriate on the map. A short video is available (http://support.google.com/maps/bin/answer.py?hl=en&answer=62843) for students that require help with this task.

Ask students, when was Australia's worst bushfire and what name has it been given? Students will then watch a Youtube video clip of Black Saturday bushfires http://www.youtube.com/watch?v=UE3UvdyaFN0 (stop the clip at 1:30). In groups of 3, students will discuss the significance of Black Saturday bushfires and note down any additional wonderings that came about after watching the video. The teacher in particular will be looking for the following:

- What happened?
- Where were the fires? How long did the crisis last?

- What factors contributed to the fires?
- Why did it happen there?
- Why couldn't the fires be contained and extinguished?
- Who responded to the crisis and how?
- What was the impact of the fires on people and places?

Now explain that each group will research, plan and deliver/present one of their wonderings on Black Saturday to the entire class using any suitable web tool such as Powerpoint, Prezi, Glogster, claymation etc., in a manner they think is most appropriate. NOTE: Students will need to get approval from teachers on their chosen mode of delivery prior to planning. Teachers should ideally have each of the above wonderings researched. Allow for overlap among groups and discuss similarities / differences in information presented by groups. Why is this case?

Conclusion

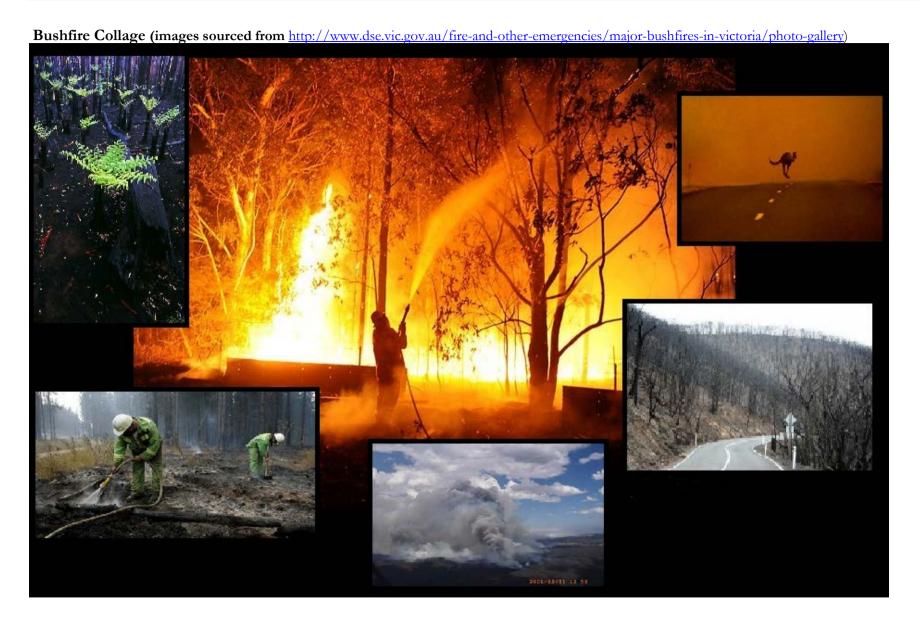
- View group presentations with the entire class. Groups should reflect on their learning, and answer questions following their presentation.
- For Teachers: Points to assess include clarity of presentation, accuracy of information, and use of resources.
- Students will then construct a timeline of events on Black Saturday using Dippity (online web tool)

Extending students learning

- Students could select one of the four major Victorian bushfires and locate and shade in the areas that were affected by the particular bushfire on a Victorian Map. They should include mapping conventions such as title, scale, legend, north point etc.
- Students could investigate another major Victorian bushfire and comment on any links that they can make between these fires and the fires of Black Saturday.

Links to other areas of the Curriculum

- English Students could write a short story from the point of view of an animal experiencing the bush fire or write an article for a newspaper to be published on the Monday following Black Saturday.
- Art Students could create artwork with a range of materials to respond to this event (collage, painting, diorama etc.).



Victorian Bushfires

(Image sourced from http://en.wikipedia.org/wiki/File:Australia_Victoria_relief_location_map.jpg)



Bushfires in Our History, 1851–2009

Date	Nickname	Location	Deaths	Losses	Area covered (hectares)	General
6 February 1851	Black Thursday	Victoria Portland, Plenty Ranges, Westernport, Wimmera, Dandenong	12	1 million sheep	5,000,000	
1 February 1898	Red Tuesday	Victoria South Gippsland	12	>2000 buildings	260,000	
14 February 1926	Black Sunday	Victoria Warburton	31			These fires raged across Gippsland throughout Feb and into March, killing 61 people & causing much damage to farms, homes and forests
Dec 1938- Jan 1939		New South Wales Snowy Mts, Dubbo, Lugarno, Canberra	13	Many houses	73,000	Many pine plantations lost; fire began in NSW and became a 72 km fire front in Canberra
13 January 1939	Black Friday	Victoria Throughout the state - Noojee, Woods Point, Omeo, Warrandyte, Yarra Glen, Warburton, Dromona, Mansfield, Otway & Grampian Ranges	71	1300 buildings Town of Narbethong destroyed	1,520,000	Fires widespread from December 1938 – January 1939; many forests and 69 timber mills destroyed
3–4 March 1942		Victoria Hamilton, South Gippsland	1	22 buildings 2 farms 100 sheep		Fire burnt on a 96 km front at Yarram, Sth Gippsland
22 December 1943		Victoria Wangaratta	10		Thousands of acres of grass country	
14 January- 14 February 1944		Victoria Central & Western Districts, esp Hamilton, Dunkeld, Skipton, Lake Bolac	32	700 homes Huge stock losses	>1,000,000	Plant works, coal mine & buildings destroyed at Morwell, Yallourn
1 December 1951		ACT Molongolo Valley, Mt Stromlo, Red Hill, Woden Valley, Tuggeranong, Mugga	2	2 houses 40 farm buildings Observatory buildings	10,000	

Date	Nickname	Location	Deaths	Losses	Area covered (hectares)	General
Nov 1951- Jan 1952		Hill New South Wales North-west NSW, Wagga Wagga, Pilliga	11		>4,000,000	
5 February 1952		Victoria Benalla	Several		100,000	
14-16 January 1962		Victoria The Basin, Christmas Hills, Kinglake, St Andrews, Hurstbridge, Warrandyte, Mitcham	8	>454 homes		Fires in the Dandenong Ranges and on the outskirts of Melbourne
17 January 1965		Victoria Longwood	7	6 houses		Major grass fire
21 Feb-13 March 1965		Victoria Gippsland		>60 houses & shops 4,000 stock	750,000 of forest 40,000 of grassland	Burnt forest and grassland
7 February 1967	Black Tuesday	Tasmania South-east Tasmania, Hobart	62	1293 houses 128 other major buildings 85,000 stock 5,400 km fencing	264,270	Estimated cost - \$45 million; 110 fires burnt within a 50 km radius of Hobart
19 February 1968		Victoria Dandenong Ranges, The Basin, Upwey		64 houses >10 other buildings	1,920	
Sept 1968- Jan 1969		New South Wales South Coast, Blue Mts, Illawarra	14	>150 houses >80 other buildings	>2,000,000	
8 January 1969		Victoria Lara, Daylesford, Bulgana, Yea, Darraweit, Kangaroo Flat, Korongvale	22	230 homes 21 schools/churches/halls >12,000 stock	800,000	280 fires broke out on the same day; 17trapped motorists died on Geelong- Melbourne freeway at Lara
14 December 1972		Victoria Mount Buffalo			12,140	Forest fire that burnt for 12 days
12 February 1977		Victoria Western Districts: Penshurst, Tatyoon, Streatham,Creswick, Pura Pura, Werneth, Cressy, Rokewood, Beeac, Mingay, Lismore, Little River	4	108 houses 340 other buildings 236,000 stock	103,000	
1 January 1978		Western Australia South-west W.A.	2		31,500	
15 January 1978		Victoria Bairnsdale	2	1 house 36 buildings 6,500 stock		

Date	Nickname	Location	Deaths	Losses	Area covered (hectares)	General
28 Dec 1980-6 Jan 1981		Victoria Sunset Country, Big Desert			119,000	Fire started by lightning strike
1 February 1983		Victoria Mt Macedon		50 Houses	6,100	
16 February 1983	Ash Wednesday	Victoria Monivae, Branxholme, East Trentham, Mt Macedon, the Otway Ranges, Warburton, Belgrave Heights, Cockatoo, Beaconsfield Upper and Framlingham	47	>180 houses >1820 other buildings 27,000 stock	210,000	Over 100 fires burnt in Victoria; estimated damage - \$190 million
16 February 1983	Ash Wednesday	South Australia Adelaide Hills, Mt Gambier, South Barwon	28	383 houses >200 other buildings 10,000 km fencing >200,000 stock		Estimated damage - \$200 million
14 January 1985		Victoria Maryborough, Avoca, Little River, Wilsons Promontory, Mt Buffalo	3	182 houses 400 farms 46,000 stock	>100,000	111 fires started on public land on 14 January
27 Dec 1990-10 Jan 1991		Victoria Strathbogie Ranges	1	17 houses 166 other buildings 13,500 stock		
21 January 1997		Victoria Dandenong Ranges, Arthur's Seat, Gippsland, Creswick	3	41 houses 2 other buildings 1 CFA fire truck	4,150	
2 December 1998	Linton	Victoria Linton	5	1 CFA fre truck	780	5 CFA fire fighters killed
18 December 2000		Victoria Dadswell Bridge		1 house 8,000 livestock (mainly sheep) 5,000 klms of fencing	14,5000 of crop and pasture	
July 2002- Feb 2003		New South Wales Greater Sydney, Hunter Valley, North Coast, Northern, Central & Southern Tablelands Illawarra, South Coast	3	86 houses 3,400 stock	1,464,000	495 fires, 151 days of severe fire activity
17 October 2002	Granite Belt Bushfires	Queensland Ballandean, Glen Aplin	1	10 Houses 11 other buildings	40,000	
8 Jan-19 March 2003	Alpine Fires	Victoria North-eastern Victoria, Gippsland	1(as a result of a road vehicle accident, not as a result of the fire)	41 houses 3 bridges 213 other structures 10,000 stock 3,000 km fencing	1,200,000	80 fires started by lightning; 8 of these combined to form largest bushfire in Vic since 1939
18 January 2003		ACT Namadji, Uruarra,	4	488 houses >100 other buildings	>157,000	Estimated damage -

Date	Nickname	Location	Deaths	Losses	Area covered (hectares)	General
		Pierces Creek, Stromlo, Cotter, Corin, Tidbinbilla, Duffy, Holder, Chapman, Kamah, Curtin, Lyons, Coppins Crossing, Murrumbidgee Valley		Mr Stomlo Observatory 4,000 stock		\$350 million
10 January 2005	Eyre Peninsula	South Australia Wangary, Wanilla, North Shields, Poonindie, Louth Bay, Greenpathc, Yallunda Flat	8	50 houses 47,000 stock	890,000	
31 Dec 2005-31 Jan 2006		Victoria Stawell, Yea, Moondarra, Grampians, Kinglake, Anakie, Ararat, Baw Baw, Glenelg, Golden Plains, Geelong, Horsham, Latrobe, Northern & Southern Grampians, South Gippsland, Moorabool, Murrindindi	2	41 houses 9 houses damaged 359 other buildings 65,598 stock 1,973 klms of fencing	160,000	
1 Dec 2006-7 Feb 2007	Great Divide Complex	Victoria Northeast Victoria, Gippsland		33 houses 13 houses damaged 255 other buildings 1,741 stock 1,357 klms of fencing	>1,154,828	
28 January 2009		Victoria Delburn		44 houses	6,534	
29 January 2009		Victoria Branxholme			40	
4-6 February 2009		Victoria Bunyip State Park		31 houses	26,200	
7 February 2009	Black Saturday	Victoria Numerous towns and localities in the vicinity of Kinglake, Toolangi, Healesville, Buxton, Marysville, Strathewen, St Andrews, Flowerdale, Beechworth, Bendigo, Central Gippsland, Horsham, Coleraine, Churchill, Kilmore, Murrindindi, Upper Ferntree Gully, Maiden Gully, Lynbrook and Narre Warren.	173	>2,056 houses >1,600 other buildings >11,800 stock >10,00 km fencing	450,000	The worst bushfires in Victoria's history and the 8 th deadliest recorded bushfire in the world. The air temperature reached 46.7 in Melbourne – highest recorded temp in an Australian capital city. Estimate of

Date	Nickname	Location	Deaths	Losses	Area covered (hectares)	General
						cost of fires
						by Bushfires
						Royal
						Commission –
						\$4.4 billion.



Lesson 5: Excursion to Marysville

Title	Community perspectives and bushfire management in Marysville	Year: 5/6	Class Size: 24
Topic and Focus	Understand the impact of bush fires on a local community Understand how different organisations helped rebuild and manage bush fire recovery	Inquiry learning stages	Going further

Learning Objectives:

- Understand what roles the Country Fire Authority (CFA) and the Department of Sustainability and Environment (DSE) had in the management and rebuilding of key infrastructure in Marysville
- Understand what stages of redevelopment the town of Marysville underwent post bush fire recovery through various exhibits, photography, video and first-hand experiences

	Domains:	Key element of standards to which lesson is focused:
	The Humanities- Geography	Learning Focus: students investigate some of the significant natural processes that operate across Australia i.e. bushfires and how people react to them, including their preparation for, and management of, natural disasters.
AusVELS / The Australian Curriculum Strand Level: 5/6	Communication	Learning focus: students experience a variety of aural, written and visual communication forms in both formal and informal settings; for example electronic communication, oral presentations etc. They begin to recognise the purpose of specialised language across the curriculum and to use this appropriately in their own communication. They develop their skills in organising ideas and information logically and clearly to suit their purpose and the needs of their audience. Listening, viewing and responding: when making meaning, students continue to develop skills in asking clarifying questions and seeking validation of their interpretations from their peers.
	English	Literacy: students participate in and contribute to discussions, clarifying and interrogating ideas, developing and supporting arguments, sharing and evaluating information, experiences and opinions (ACELY1709). They use interaction skills, varying conventions of spoken interactions such as voice volume, tone, pitch and pace, according to group size, formality of interaction and needs and expertise of the audience (ACELY1816).

Interpersonal Development	Building social relationships: students demonstrate, through their interactions in social situations, respect for a diverse range of people and groups. They accept and display empathy for the points of view and feelings of their peers and others.
Thinking processes	Students make observations and pose questions about people and events within and beyond their own experience, and develop a growing awareness of the complexity of the world around them. Using these questions as a basis, students undertake investigations independently and with others

Assessment Strategies: Students are asked to identify and capture an object, sound or image that is a reminder of their visit to Marysville with the intent to develop this into a formative assessment in Lesson 9.

Timing	Location	Discussion/Activity
9.00am	Bus to Marysville	Before, or while, travelling to Marysville, the teacher will explain to students that they need to collect some reminder of their visit. This could be in the form of an object, such as a new leaf, or a photograph of something that was poignant to them in and around the town. It could be a voice recording of someone addressing the group or a postcard from the visitors centre. They must ensure they obtain this item sensitively, with regard to the peoples of Marysville and the natural environment. Students will be asked, in the reflection part of this unit (see lesson 9), to incorporate this object in some form of artwork, written work or new media presentation, which reflects their learning from Marysville and the unit more generally. See lesson 9 for more details.
10.30am	Arrive at Gallipoli Park, Marysville (see appendix A for location photographs)	Students have 10 minutes to stretch their legs, use toilets and store bags in the Tourist Information Centre (located next door to Gallipoli Park) and use the public toilets at Gallipoli Park.

Timing	Location	Discussion/Activity	
10.40-11.10am	Black Saturday photography/multimedia exhibition, Marysville Tourist Information Centre	 (www.gomarysville.com) and multimedia database dedicated to the rebuilding and ongoing recovery of Marysville. The exhibition includes photographs, QR coded multimedia (interviews, songs, videos) to be accessed via a tablet devices for the students as well as artifacts and objects that each tell a story. The exhibitions a number of key community members including local artist Bruno Torfs (www.brunosart.com) GP Dr.Lachlan Fraser (http://bit.ly/ZbNBJX) who both have been involved in the reconstruction effects agreed to cover the following topics: A brief, general history of the town and surrounding area Impact of bush fires on the town of Marysville including loss of life, buildings and houses, implogging industry, tourism infrastructure Post-bushfire recovery efforts and the establishment of the relief centre, donations from aroun Australia, rebuilding gardens, return of wildlife Personal stories and objects including artefacts at the museum, destroyed bikes, trucks and art 	
11.10-11.30am	Bus to Steavenson Falls	Sculptures. The Falls are located 10 minutes from the town centre. In this time the students have 10 minutes to stretch their legs and use toilets which are located at the entrance, near the carpark.	
11.30-12рт	Large viewing platform, Steavenson Falls	A CFA representative from the fire education unit (Hume region) will discuss the role that the CFA had in relation to the history of bushfires in the local area and the prevention and management of the Black Saturday bush fires. Topics will include:	
		 A brief history of the local area's fire history Environment, where Marysville sits in relation to forest, elevation and road access Fire Ready Victoria meetings, CFA's role in fire education and fuel reduction strategies Community Fireguard groups and the training and management of the fire brigade Murrindindi Shire and the role of the Municipal Fire Prevention Officer CFA's role in fighting the Black Saturday bush fires & the impact to Steveanson Falls. 	

Timing	Location	Discussion/Activity
12рт-12.20рт	Walk to the main platform via the walking track and then to	Spend 10 minutes at the Falls and discuss forest regrowth and remaining animal populations. Ask students to identify elements of the landscape that they believe are examples of regrowth and explain why.
	the hydro-electric turbine, Steavenson Falls	Walk to the turbine platform and discuss the hydro-electric turbine, which was the only salvageable piece of infrastructure from the bushfires. The turbine powers a large floodlight that makes the Falls viewable at night and generates enough power to feed back into the energy grid.
		Cross-curriculum topics that cover sustainability as well as Level 6 science, (generation of electricity from a variety of sources) can also be explored using the turbine as an example.
12.20-12.50рт	Large viewing platform, Steavenson Falls	Peter Cobb was the forest ranger for Marysville with the DSE at the time of the 2009 Black Saturday bushfires. He later worked as the Steveanson Falls Redevelopment Manager and oversaw the \$3 million bushfire recovery project. As a ranger, Peter has extensive knowledge regarding bushfire ecology and has intimate knowledge of the issues involved with reestablishing the area for tourism. The talk will take place near the main platform Peter has agreed to cover the following topics: Overview of the site and the impact the bushfire had on the original site The stages involved in the redevelopment including bush clearing, roads, tourist amenities, power, hiking trails and new viewing platforms
		 Issues encountered when redeveloping the site including funding, access and community involvement The role the DSE had in relation to the recovery of the environment, especially impact on local wildlife
12.50-1pm	Bus to Gallipoli Park, Marysville	On the way back to town, discuss with students the redevelopment of Gallipoli Park that was made possible due to national and statewide donations to the Victorian Bushfire Appeal. Discuss elements of the park including the Kin Playspace, the New Life sculpture designed by Bruno Torfs and the Reflective Garden, which have been designed to honour lives lost and celebrate the Marysville bushfire recovery.

Timing	Location	Discussion/Activity
1рт-2рт	Gallipoli Park, Marysville	Lunch and play at Gallipoli Park, which is located close to local shops, public toilets and amenities
2рт-3.30рт	Bus to Melbourne	Provide students with an opportunity to reflect on their visit to Marysville and consolidate their learning regarding the assessment piece.

Contacts:

Barry Thomas (GoMarysville) - 0418 175 090

Peter Cobb (DSE) – (03) 5957 7111

Alex Caughey (CFA) Community Education & Media Coordinator - (03) 5799 1517

Gallipoli Park:











Go Marysville Black Saturday Exhibition:









Steveanson Falls – LargeViewing Platform



Steveanson Falls – Hydro-Electric Turbine



Steveanson Falls – Main Viewing Platform



Steveanson Falls – Public Amenities





Lesson 7: Bushfire preparedness and awareness

Title	Bushfire preparedness and awareness	Year: 5/6	Class Size: 24
Longe and Hocus	To understand and identify the factors responsible for bushfires. To communicate key messages about bushfire prevention and awareness	Inquiry learning stages	Sorting out Going further

Learning Objectives:

- Identify what materials, factors and risks are associated with bushfire events
- Develop key messages for the prevention and awareness of bushfires

Concepts and Understandings:

- Identify how to reduce the impacts of bushfires in and around the home
- Identify potential hazards and possible safety measures for bushfire threat evaluation
- Recognise the dangers of bushfire events and the risk they pose to human life
- Use appropriate language to construct messages about the risks of bushfires and their prevention

Skills and Behaviours:

- Follow an inquiry based approach to learning
- Participate in pair and group discussion
- Evaluate and develop key messages and persuasive arguments

Values and Attitude:

- Consider and value other students' opinions and contributions
- Explore different perspectives from both rural and urban settings in relation to bushfire threats
- Understand that bushfire awareness is both an ethical and civic responsibility

AusVELS / The	Domains	Key element of standards to which lesson is focused:
Australian Curriculum	The Humanities- Geography:	Learning Focus: students investigate some of the significant natural processes that operate across Australia i.e. bushfires including their preparation for, and management of, natural disasters.

Strand Level: Level 5/6		Learning focus: Students experience a variety of aural, written and visual communication forms in both formal and informal settings; for example electronic communication, oral presentations etc. They begin to recognise the purpose of specialised language across the curriculum and to use this appropriately in their own communication. They develop their skills in organising ideas and information logically and clearly to suit their purpose and the needs of their audience.
	Communication	Listening, viewing and responding: When making meaning, students continue to develop skills in asking clarifying questions and seeking validation of their interpretations from their peers.
		Presenting: Students ask clarifying questions about ideas and information they listen to and view. They develop interpretations of the content and provide reasons for them. They summarise and organise ideas and information, logically and clearly in a range of presentations.
		Language: students use comprehension strategies to interpret and analyse information and ideas, comparing content from a variety of textual sources including media and digital texts (ACELY1713). They use a range of software, including word processing programs, learning new functions as required to create texts (ACELY1717)
	English	Literacy: Students participate in and contribute to discussions, clarifying and interrogating ideas, developing and supporting arguments, sharing and evaluating information, experiences and opinions (ACELY1709). They use interaction skills, varying conventions of spoken interactions such as voice volume, tone, pitch and pace, according to group size (ACELY1816). They plan, rehearse and deliver presentations (ACELY1710)
	Information and Communications Technology	ICT for creating: students safely and independently use a range of skills, procedures, equipment and functions to process different data types and produce accurate and suitably formatted products to suit different purposes and audiences.
	Thinking processes	Students make observations and pose questions about people and events within and beyond their own experience, and develop a growing awareness of the complexity of the world around them. Using these questions as a basis, students undertake investigations independently and with others
	Interpersonal	Building social relationships: Students demonstrate, through their interactions in social situations, respect for a diverse range of people and groups. They accept and display empathy for the points of view and feelings of their peers and others.
	Development	Working in teams: Students work effectively in different teams and take on a variety of roles to complete tasks of varying length and complexity. They work cooperatively to allocate tasks and develop timelines. Students accept responsibility for their role and tasks.

Assessment Strategies:

The diagnostic assessment at the beginning of this class will allow the teacher to assess the skills and prior knowledge of each student in relation to the prevention of bushfires. Informal assessment will be applied to each student's ability to construct their own messages and slogans related to bushfire prevention and how this information is presented (is the work organized, creative, justified?).

Resources and Materials:

IWB, projector or TV with AppleTV to display interactive CFA website

Students bring in a digital photo of the front, back or side of their house for comparison activity

Digital cameras or iPads OR prepared photos of school environment including streetscape, outdoor play areas, gardens and ovals

Prepared digital photos of the local area including parks, shops or community areas

Stage of lesson	Student Action /Tasks	Differentiated Learning	Teacher Action
Introduction Tuning in	Students asked to draw a table on paper with one column outlining risk and the other outlining prevention. Students look at their own photos from their house and identify and assess the risk and prevention strategies for protecting their home in a bushfire event. Students get into pairs and compare results. Have select students' present 2-3 examples to the rest of the class.	Ensure that groups have a range of students with different learning abilities. Visual intelligence is explored through the photo activity	Ask students to assess potential risks and identify possible preventions Check and note misconceptions regarding bushfire threats (green trees, green grass) Ensure that students justify their reasoning in relation to potential threats and preventative measures
Body of lesson Finding out	Finding out activity: Discuss with the whole class the following tools for preparing a property for a bushfire event "Tips on how to prepare your property" (CFA, 2012a) http://www.cfa.vic.gov.au/plan-prepare/prepare-your-property/ "Am I at risk? (CFA, 2012b) http://www.cfa.vic.gov.au/fm files/attachments/plan and prepare/frk/am-i-at-risk.pdf	Using an IWB, have students select areas on the screen themselves.	Identify any examples from the CFA interactive display that were mentioned in the tuning in exercise and link back to this activity Use appropriate language for identifying potential hazards and concepts

Introduce, describe and identify language/concepts like flammables, embers, sources of fire fuels, vegetation, weather, topography.

Students then review the following passages from the 2009 Victorian Bushfire Royal Commission (Victorian Bushfires Royal Commission, 2009), shown on IWB:

"Every summer I cleared our block of all sticks and debris. From November through to December, when everything had evaporated and become tinder dry, I would make a pile of all the leaves, cover it with dirt and water it down. This mulching effect helped the garden and being a small block of land it was easy to manage." *Mike Wasley*

"Even though we had a fire plan, Reg and I never dreamed that we would have to defend our home against a bushfire because there were no large trees near our unit. All the nearby trees were lower than the roof-line. We always planned that in the event of a fire, we would go up and defend the Historical Society because we would not need to defend the house." *May Kenealy*

"To give us the best chance of defending the house, we always kept the gutters clean and we had gutter guard installed to prevent rubbish build up. Every year, we also kept wheelie bins full of water on three corners of the house." *Graeme Brown*

Discuss factors that influence bushfires, such as climate, weather, fuel and topography, to the area in which students live to help them assess their risk.

Clarify concepts and identify different perspectives when referring to the witness impact statements

Activity Going further	Activity: Students split into 4 groups of 6. Each group is asked to take 3 photos with a digital camera/iPad of several areas around the school including streetscape, outdoor play areas, gardens, ovals.	Kinesthetic and visual intelligence is explored through the photo essay activity.	Circulate between groups and identify possible gaps in understanding.
	Once back in class, each group assesses photos from the school/local area in terms of their bushfire risk, discussing both the risk and prevention strategies they would consider.		
	Students use the "Am I at risk? (CFA) Fire Safety Kit as a reference		
	http://www.cfa.vic.gov.au/fm files/attachments/plan and prepare/frk/am-i-at-risk.pdf		
	All students must come up with a short, witty slogan that includes 3 points that reinforce the message of prevention/awareness of bushfires and a possible design (e.g. in the form of a logo, t-shirt, poster etc.).		
Closure Reflection	Have 2-3 students from each group report back to the class with their slogan and related messages and their possible method of communication.		
<i>y</i>	Reinforce learning objectives about identifying how to prevent bushfires in and around the home and communicating key messages about bushfire prevention and awareness		



Lesson 8: Community Rebuilding

Title	Rebuilding communities affected by the Black Saturday bush fires.	Year Level: Grade 5/6	Class Size: 24
Topic and Focus	To understand how community organisations and projects have assisted the rebuilding of Victorian rural communities affected by the Black Saturday fires.	Inquiry learning stages	Going further

Learning Objectives:

- To understand what is a community organisation and a community project.
- Students learn about a range of community organisations and projects that have assisted communities in the rebuilding processes after the Black Saturday bush fires.
- Students understand the importance, benefits and support that are provided by local community projects in rebuilding communities after a natural disaster such as a bush fire.

Concepts and Understandings:

• To understand how and why communities devastated by natural disasters such as the Black Saturday fires are significantly supported and rebuilt by their involvement and interaction with community programs and organizations.

Skills and Behaviours:

- To work in small groups that encourage creative thinking strategies in response to the questions asked and concepts discussed throughout this Unit.
- To work in a class environment and culture that encourages the contribution of ideas and thought provoking responses/insights to the resources provided and questions asked throughout the Unit.
- To contribute and listen respectfully to class and group discussions as well as questioning and responding openly to the ideas of others.
- To understand and use a Popplet collaborative ICT tool to create interactive group mind maps.
- To develop comprehension skills that allow students to think broadly and openly about the topic and resources provided.
- To use creative strategies to problem solve and design fundraising initiatives.

Values and Attitude:

• To appreciate the importance and diversity of benefits community organisations and networks provide for the health and cohesion of rural country towns.

- To appreciate the importance and diversity of benefits community organisations and networks provide for the rebuilding of communities affected by bush fires.
- To understand how devastating bush fires can be for people living in Australian country communities.
- To appreciate how important the support structures are that people provide for each other within their communities particularly in stages of recovery.

VELS Strand Level:	Domains:	Learning Focus
AusVELS Strand Level:	The Humanities- geography	Learning focus: Students explore the protection of the natural environment through the creation of nature parks, national parks
The Australian Curriculum Level 5/6		Content description: The impact of bushfires or floods on environments and communities, and how people can respond.
Level 37 0		Elaborations: Students explain the impacts of fire on Australian vegetation and the significance of fire damage on communities.
	Communication	Learning focus: Students use their understanding of communication conventions to communicate effectively with peers and to respond appropriately when they are part of an audience; for example, by waiting for the communication of others to be completed before responding. They practice listening attentively to identify and communicate main points to others.
		Listening, viewing and responding: They develop interpretations of the content and provide reasons for them. They explain why peers may develop alternative interpretations.
	Literacy	Presenting: At Level 6, students summarise and organise ideas and information, logically and clearly in a range of presentations. They identify the features of an effective presentation and adapt elements of their own presentations to reflect them. They plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis. (ACELY1710)
	Information and	Speaking and Listening: Students listen to discussions, clarifying content and challenging others' ideas.
	Communications Technology	Students apply known ICT tools for visualising thinking in new ways to make links between existing and new knowledge. They learn to use tools like graphic organisers.
	Interpersonal Development	Working in teams: Students work effectively in different teams and take on a variety of roles to complete tasks of varying length and complexity. They work cooperatively to allocate tasks and develop timelines. Students

Thinking	accept responsibility for their roles and tasks.
processes	Learning focus: Students make observations and pose questions about people and events within and beyond their own experience, and develop a growing awareness of the complexity of the world around them. Creativity: Students use creative thinking strategies to generate imaginative solutions when solving problems.

Assessment Strategies:

- The class co-creates a think board/mind map to record prior knowledge about community organizations and projects. This map is contributed to throughout the lesson.
- The students create pie charts to record their personal knowledge and experience of community organizations and projects.
- In small groups students collectively discuss their ideas and record their answers to the questions provided in their resource material on a collaborative ICT Popplet tool and then share this information with the class.
- Students write responses in their Think Journals to the questions asked about the community organization or project they studied.
- Children are asked to record their personal experiences and knowledge of community organisations and projects in a graphic organiser format as well as imagining the community organisations that have been active in the rebuilding from the devastation caused by Black Saturday.
- Creative strategies that could be used to explain and represent the student's community organizations or projects created might include: ICT generated glogster posters or newsletter articles or persuasive letter writing or recorded interviews or art works using collage or comic drawn strips or poems, or a song etc

Students Background Knowledge:

- A group class discussion is used to seek out evidence of prior knowledge in a supportive environment considering the potential sensitivity of the subject material discussed. Please refer to lesson introduction for these specific questions.
- Students also break into small groups and use graphic organisers to collectively record their knowledge and experiences of community organisations.

Resources and Materials:

- Computers to create ICT Popplets and view websites and videos specified.
- Large screen to show class videos.
- Website links that provide suitable research material.
- Video /documentaries to watch from the WWW.
- Access to internet research facilities.
- Thinking journals for recording ideas.
- Writing and publishing materials.
- Resource material included in this lesson plan.

Introduction

The teacher introduces the topic and asks questions and seeks out evidence of prior knowledge in a supportive environment considering the potential sensitivity of the subject material discussed.

These questions would include:

"Does anyone in the class know of anyone personally who was affected by the Black Saturday bush fires? If so are you comfortable sharing this information with the class?"

Has anyone been to the towns that were affected by Black Saturday before or after the fires occurred? What did you see or experience?

Individuals mark on a large classroom map the regions or towns they have visited (maps on page 53).

Introduce the video as a snapshot of the town Marysville before and after the fires of Black Saturday.

Play first video 3.23 minutes as a tuning in activity – This Was My Town.mp4

http://www.youtube.com/watch?feature=endscreen&v=S0LpKT_-Kmw&NR=1 This video depicts a local musician singing a song he has composed about Marysville with images shown of locations before, immediately after the Black Saturday fires and more recently as the town recovers. Examples of these sites include the primary school, local swimming pool, the main street, people's houses, the patisserie shop, the Australian landscape etc.

The students collectively discuss their responses to the video in a supportive class environment.

The students are introduced to the lesson focus examining how local community organisations and projects have supported and united people to help rebuild devastated communities in the region affected by the Black Saturday fires.

The class creates a think board /mind map to record their prior knowledge about what is a community organisation, network or project?

What type of assistance and support would the The Red Cross, the Salvation Army and The Lions Club have provided to the communities affected by the Black Saturday fires? Why are they important?

What other community organisations or projects do you think currently exist or have been involved in the towns affected by the Black Saturday fires?

Students break into groups of 4 and discuss and create pie charts to record in their Journals all the community organisations they know about and have experienced personally, such as: sports, cultural, relief aid, environmental, hobby organisations.

The class share together their knowledge of community organisations and new ideas are recorded on the class's mind map.

Main Body of Lesson

Students will break into 4 groups and each group will be allocated resource material describing 1 community project or organisation. Each group will work together to discuss, and record the answers to the questions provided.

The 4 community organisations and projects are:

1."Into the Light" lantern parade was a community event involving 11 primary schools and surrounding communities affected by Black Saturday fires. Children created and paraded with their lanterns enacting a symbolic collective action for individuals to confront and overcome their fears of fire. Symbolic performances occurred i.e.: 'walking from the darkness of Winter into the light of Spring.' as well as an extensive shadow puppet performance. Aboriginal singing and collective rituals provided a community healing process and celebration for all involved. Please refer to handouts provided (see pages 54 and 55, City of Whittlesea (2012)).

Questions:

- 1. Who participated in this community event?
- 2. What activities happened in this community event?
- 3. Why was this community event created?
- 4. What do you think would have been some of the positive outcomes of this event for the participants?
- 5. What do you think would have been some of the positive outcomes of this event for the broader community involved?
- 6. How would this event have generated linkages between different neighbourhoods and schools?
- 7. Try to imagine and record in point form how this project might have started and what structures would be needed to organise and run a project like this. i.e.: funding, ideas, volunteer support, advertising etc

2. The re-establishment of Marysville's football club and ground.

Marysville football club. http://www.gomarysville.com/video/footy.htm Refer to video (Thomas, 2010).

After Black Saturday, the football club and ground was re-established in Marysville, and for the first time in 25 years goal posts were reinstalled into the football field. The dynamic reawakening of the community spirit of the football club has generated linkages between nearby towns, inspired social and fund raising activities and gatherings and inspired the establishment of Auskick for emerging young football players. The elders who played football for Marysville in the past are thrilled to have their football home ground, club and community re-established.

Questions:

- 1. Who attends or watches a footie team?
- 2. What age groups get involved in football as a player or as an audience member?
- 3. What are some of the benefits of a team sport?
- 4. What would be some of the benefits a local football team would provide for a community?
- 5. What are some activities generated by a football club for the local community?
- 6. How would a football club in one town like Marysville provide linkages to other neighbouring towns?
- 7. Try to imagine and record in point form how this project might have started and what structures would be needed to organise and run a project like this. i.e.: funding, ideas, volunteer support, advertising etc.
- 3. Green Connections is a community project: for schools and surrounding communities of Kinglake and Marysville and is involved in the rehabilitation of the natural environment as a means to promoting mental and physical wellbeing of the participants involved. Clearing paths, re-vegetating fire -affected landscapes, creating art works in meeting places are some of the projects that have occurred. Please refer to handouts (pages 56 and 57, Parks Victoria (2012))

Questions

- 1. What activities would de done by this community project?
- 2. How would the actions done by this organisation benefit the wider community?
- 3. What would be some of the benefits experienced by members of this community project?
- 4. List some ways in which this project might link different communities together?
- 5. How would young people benefit from connecting with nature and its rejuvenation?
- 6. Why do you think students have created mosaic designs and symbols on sitting rocks in meeting places?
- 7. Try to imagine and record in point form how this project might have started and what structures would be needed to organise and run a project like this. i.e.: funding, ideas, volunteer support, advertising etc.
- 4. **The Letterbox project** with Marion Oakley Strathewen. (Binks (2011), https://open.abc.net.au/posts/strathewen-the-letterbox-project-50sb0nq). Marion Oakley with the support of Arts Victoria and predominantly local women from Strathewen worked together supporting each other, sharing stories whilst designing and mosaicing individual letterboxes for residences of Strathewen that had been affected by the Black Saturday fires. These letterboxes became symbols of colour, hope, belonging and repositories of supportive communication for the residents. Refer to video please.

Questions:

- 1. Why did residents make letterboxes in this community arts project?
- 2. Why did they use the particular symbols and designs on their letterboxes?
- 3. What communication and support amongst community members did this project generate?
- 4. How did this arts project benefit the broader community?
- 5. What members of the general community would of benefited from this project and how?
- 6. Once the letterboxes were installed, why were they important for the neighbourhood?
- 7. Try to imagine and record in point form how this project might have started and what structures would be needed to organise and run a project like this. i.e.: funding, ideas, volunteer support, advertising etc

Having recorded their responses to the above questions in their journals, the students will work in the same small groups to invent together an imaginary youth community organization or project to inspire and support the youth affected by Black Saturday bushfires. Each group could choose how they intended to explain and represent their youth community organization or project to the class.

Creative strategies that could be used include: ICT generated glogster posters or newsletter articles or persuasive letter writing or recorded interviews or art works using collage or comic drawn strips or poems, or a song etc.

Conclusion/Reflection

Each small group will share with the class:

- 1. An introduction of the community organisation or project they researched and a description of the activities generated that have supported the communities affected by Black Saturday
- 2. A brief description of the benefits this project/ organization has provided for the community.
- 3. Showcasing the youth community organization or project their group has created and an explanation of why they decided on this concept.

A Map of the towns effected by the Black Saturday Fires. Eildon Strath Creek Limestone* Flowerdale Kilmore Taggert Rubicon Murrindindi, Clonbinane KILMORE EAST Glenburn Kinglake West Whittlesea. Kinglake Toolangi Strathewen* Narbethong St. Andrews Creek, Chum Creek Roads Healesville Origin of fire Albury/Wodonga Maiden Gully Eaglehawk Beechworth Mudgegonge Long Gully Bendigo Flowerdale Kinglake Kinglake Porthwesterly Murrindindi VICTORIA Kilmore Taggerty Area of detail East most of Saturday Whittlesea Marysville Strathewen Narbethong St Andrews Toolangi Steels Creek Melbourne e Chum Creek Yarra Glen Healesville Geelong Traralgon Mirboo North State Park Sale Koornalla The temperature, a record of 46.4C in Melbourne, falls sharply but winds associated with the change are gusting at up to 125km/h Churchill Callignee Fires that were heading southeast suddenly head northeast, putting new communities in danger. The eastern flank of the fire becomes one immense firefront N

McGourty (2009)

Bushfire Recovery





City of Whittlesea Bushfire Recovery Community Update # 73 Monday 15 October 2012

Into the Light Community Celebration



Into the Light was a community event staged at the Whittlesea Showgrounds on 1 September to celebrate the coming of Spring. Over 1300 people participated in the lantern parade that gently wound its way through the showgrounds and spiralled towards the cattle shed while local musicians played and the Koori Youth choir sang a song in language. The Kids Art Group then performed a shadow puppet before audience members joined local choirs and sang en masse.



Over 600 lanterns were made by school children in 11 local primary schools. Community members made more lanterns at weekend workshops.

Silk paper leaves dressed a bare (lantern) tree. A pool of water rested at the centre of a giant spiral walk and audience members took a journey to place a white stone, charged with their personal thoughts and memories, in the cool waters. The spiral walk was ringed by a line of 'floating (lantern) boats' made by sculptor Leanne Mooney and a seed pod installation made by secondary college art students. Thanks to everyone

who helped make the parade magical, the process rich and the community and artistic outcomes varied and plentiful.

City of Whittlesea Bushfire Recovery Information 9217 2252

Fire Recovery Unit 1800 055 714 Telephone Interpreter Service 9679 9879

bushfirerecovery@whittlesea.vic.gov.au www.whittlesea.vic.gov.au

Into the Light 2012

Creative arts activities and events have been a keystone of the bushfire recovery effort in Whittlesea and surrounding fire-affected communities.

Into the Light 2012 was a community event staged at the Whittlesea Showgrounds on Saturday 1 September to commemorate the 2009 fires and assist in the recovery of the local community. It involved a theatrical performance which celebrated walking from the darkness of winter into the light of spring.



Some of the highlights of the show included a magical lantern parade that engaged directly with audience members, while local musicians played and a Koori Youth choir sang. A local children's art group also performed a shadow puppet play on a 25 metre long screen.

Around 1300 people participated in the parade, watched by an audience of 200 community members. Over 600 lanterns were made by school children working in collaboration with local artists, who participated in workshops with 11 primary schools throughout fire-affected communities.

In parallel, community members made personalised lanterns during weekend workshops with the local artists, who met regularly in the months before the show to develop a performance that reflected the unfolding story of their community's recovery.

The project was a community driven, rich and creative process that crossed municipal boundaries and formed partnerships with programs from neighbouring councils, as well as local arts, educational and community organisations.

Green Connections

Connecting People with Nature



Who are we, what do we do, and how can you help?

Green Connections is a community project initiative, funded through the Victorian Bushfire Appeals Fund. People and Parks Foundation, a not for profit charitable organisation, working in collaboration with the community, to connect people with nature.

Currently Green Connections have four community nominated projects in the Kinglake and Marysville areas affected by the 2009 Black Saturday fires.

The Green Connections project includes a range of activities and events to link community groups, business and school groups to environmental projects.

Green Connections are looking for volunteers to help make a difference in fire affected areas through participating in hands on environmental activities as part of these projects.

You can get involved in a range of activities including guided walks, planting days and learning how to build a trail.

PROJECTS

Wallaby Springs Reserve, Kinglake

Improving the natural habitats, providing picnic and visitor facilities.

Number 1 Creek, Kinglake

Proposed trail link between Number 1
Creek and Bollygum Park.

Cathedral Range State Park

Construction of a family friendly alternative walking track from Sugarloaf Saddle to Cooks Mill.

Buxton Silver Gum Reserve

Protecting the Buxton Sliver gums - Community planting day and other activities.



Contac

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For more information on People and Parks Foundation and Green Connections Programs please visit http://www.peopleandparks.org

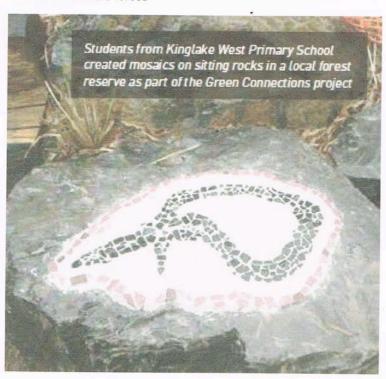
Healthy Parks Healthy People



Green Connections Project

The People and Parks Foundation, with funding from VBAF, engaged with communities and local schools around Kinglake and Marysville in hands-on environmental rehabilitation projects, aimed at improving physical and mental health. Activities included tree planting, walking track construction, weeding and the manufacture and installation of nest boxes.

The project included the production of a DVD titled 'Nest' by a local filmmaker, which captured the journey of school children as they reconnected with the forest around them, supported by a skilled artist and People and Parks staff. They did this by creating their own mosaic installations on the surfaces of sitting rocks and ephemeral sculptures from materials within the forest.



MAJOR ASSESSMENT TOOL (LESSON 11)

Public Awareness Campaign

(adapted from VCAA [2011c] and Crough, Fogg, Hills [2008])

Focus statement

Students consider what they know about bushfires, actions that will increase their safety and reduce their risk in a bushfire, and how people respond to and recover from fires. They will bring together the ideas developed throughout the inquiry unit and use these ideas to create a public awareness campaign. They will present this campaign to a relevant audience.

The activity

Initially, in the classroom, students will summarise key ideas and understandings from the unit. For EAL students and those who are struggling with the concept, the teacher could guide discussion based on the following points.

- Bushfires are influenced by several factors. Why is it often difficult to predict the path of a bushfire? Why are major bushfires difficult to control? Refer to the elements that influence fire behaviour.
- Homes can be made safer by making relevant preparations. Discuss ways in which students' homes can be made safer by reducing the bushfire risk. Identify some key actions that can be carried out, when they should be performed and why they are important.
- A bushfire plan can help you remember what needs to be done during a crisis. Describe key elements of a bushfire plan and why it is important to have a plan.
- The Fire Danger Ratings predict how a fire would behave if started and how difficult it would be to put out. The higher the rating, the more dangerous the conditions. Fire danger ratings provide us with triggers to act. Discuss different approaches to bushfire readiness and why leaving early is the safest option on days of high fire risk. Refer to the Fire Danger Ratings and note when leaving early is the safest option.
- As part of a bushfire plan, a bushfire kit is essential. What equipment should be included in a home bushfire kit? Review a list of the important equipment that a family should prepare and take.
- Knowing who to contact in a bushfire emergency can help save lives. Who should you contact in case of a bushfire? What information will you need to provide? Role-play a bushfire emergency with students taking on the role of home owner or fire brigade staff.
- Support is available to help people recover from bushfires. What helps people recover from bushfires? Refer to individuals, family, community and the broader community.

Learning through action

The key ideas and information could be developed into a public awareness campaign along a theme such as:

- preparing our community for a bushfire
- helping people, communities and the environment recover from bushfires
- learning to live with the threat of bushfires.
- social, economic and environmental impact of bushfires

The public awareness campaign could include:

- a poster display in a prominent location in the school such as near the school office
- small group presentations to other classes, parent associations or school assemblies
- a dramatic play about a family developing a bushfire plan and bushfire kit
- a dedicated parents evening to discuss the work on bushfires

 conducting a survey about preparing for bushfires and presenting the data to the community with key messages

• debate on the value of bushfires

Students will be divided into groups of 3-4 depending on the range of ideas students come up with. The following guiding questions will help students organise their ideas into a plan for their public awareness campaign.

Audience and Purpose

- 1. Who is the particular audience for this information?
- 2. What does the audience already know?
- 3. What does my audience want or need to know about this?
- 4. What will I do to appeal to my audience?

Content

- 1. What message(s) do I want to give?
- 2. From what or whose point of view shall I write/present?
- 3. What points do I want to make?
- 4. Do I still need to find further information?

Organisation (includes form/medium)

- 1. What is the best way to get my message across?
- 2. What organisational features will I use? e.g. headings, subheadings, diagrams
- 3. What is the best way to present or publish this information? What media e.g. online, print, podcast or video will I use and how will it suit my audience?
- 4. Who will do what in our team?
- 5. How will we know we are on track?

These are some possibilities and tools that students could use when planning and creating their campaign.

• Creating claymation, scripting and acting out advertisement

Webcams, Video

http://www.youtube.com.au

http://animoto.com/

http://www.slideshare.net/

Apple iMovie

http://www.voki.com/

http://goanimate.com/

http://vimeo.com/

Http://www.qwiki.com/

• Designing graphic panels, artwork, comics, cartoons, illustrations, maps

Comic Books http://www.hypercomics.com/tools

Google Earth; Google Maps http://maps.google.com.au/maps

Photos http://www.flickr.com/

Audio/video captions for images. Overlay comic bubbles http://www.bubbleshare.com/

Design in 3D http://www.google.com/educators/p-sketchup.html

http://scratch.mit.edu/

http://blabberize.com/

http://www.wordle.net/

http://www.kerpoof.com/

http://www.toondoo.com/

Writing jingles, poems, interpretive signage and publications
 Blogging tool for writinghttp://wordpress.com/

Creating and scripting a news report,; writing songs and music.

Podcasts; Recording and editing sound http://audacity.sourceforge.net/
Apple iBooks Author

Apple Garageband

http://www.flipsnack.com/

Assessment Rubric

Criteria	Outstanding work	Met all expectations well	Met basic expectations	Working towards expectations	Score
	4	3	2		
The public awareness campaign contained accurate information and was well researched.					
The public awareness campaign (be it a poster, a play, a speech) had a clear message which was put across well					
The public awareness campaign was appropriate for the audience chosen					
The team worked well with all members having a role to play in the public awareness campaign					

Student self-assessment sheet

(adapted from Boyle et al, 2010, p80).

In addition to the teacher's feedback, students will have a chance to reflect on their work. Reflecting on their achievements is important as they can see where they think they did well; identify strengths and recognise areas for improvement. Students can then set goals for future assessment tasks.

Students will assess their performance based on the following statements, remembering that only their teacher will see this sheet.

My group work	Yes	Getting there	Need to work on this
My group worked well together and easily made decisions about what we would do.			
I contributed positively to group decisions and was able to compromise with others then not everyone agreed.			
Tasks were divided equally between group members.			
My research skills			
I knew where to go to find information for my tasks, and who to ask for help.			
I took good notes from resources and organised my notes so that others in the group could understand them.			
I referenced all material, so that my group could produce an accurate bibliography.			
My awareness campaign			
I used my research to help the group produce an interesting and informative campaign.			

Things I did best during this task were:	
Things I could improve upon are:	
Three things I contributed to group work were:	

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APPENDIX 1: LESSON SUMMARIES

Lesson 2: Natural Disasters In Australia

This lesson mostly fits into the finding out and sorting out stages of inquiry.

This lesson will start with a recap of lesson 1 vocabulary, and a discussion of the class blog. Are students using it to share information, research the questions they have on disasters, pose additional questions, debate and direct the subject to their interests. Is it becoming an extension of the classroom? Take time as a class to look at people's inputs to the blog.

Each student will then be provided with an outline map of Australia. Using

http://disastermapper.ema.edu.au/#/intro (Australian Government (...), continuing from lesson 1), and working individually, students represent on the map where specific natural disasters occur in Australia. Using the website, students add one or two facts about each type of disaster. Students will build their geospatial skills as they study the map.

Students who finish this task quickly, or who are in need of a greater challenge, will start exploring these natural processes/ disasters further on line. Information gathered can be added to the map. The following websites will be suggested as start points:

http://www.ga.gov.au/hazards.html

http://www.australiangeographic.com.au/journal/australias-worst-earthquakes-top-10-most-devastating.htm

http://www.bom.gov.au/tsunami/history/index.shtml

http://www.australiangeographic.com.au/journal/the-worst-floods-in-australian-history.htm

http://www.ga.gov.au/hazards/flood/flood-basics/causes.html,

The teacher will then explain how this unit will now focus specifically on one type of natural disaster, bushfires, as these are highly topical in Victoria and affect many of the communities on Melbourne's fringes.

To conclude, each student will write a few sentences on disasters in Australia to be handed in, with their map, as part of ongoing assessment.

Lesson 3: Fire to shape our Land

This lesson forms part of the finding out component of the inquiry unit.

Resources: Kakadu Man poem by Bill Neidjie

This lesson is focused around how fire has been used in the past (and still is in various parts of Australia) by Indigenous people. Students read the poem "Kakadu Man" by Bill Neidjie and brainstorm ideas about what they think it means. In groups of 4, they investigate how Indigenous people used fire effectively to manage the land and ecosystems in which they lived before European settlement. Through online research, journal articles and books available in the classroom and library, students are encouraged to explicitly explore these practices and explain if and why they have changed. Teacher can guide inquiry by posing the following questions:

- How did Indigenous people use fire?
- How has European settlement affected the way in which Indigenous people use fire?
- How can bushfires be important for the environment?

After researching, students will work individually to create their own poem, picture storyboard, narrative piece about what fire means to them based on the information they have just learnt. This activity is designed to see if there are differing opinions on fire and whether it can be used for good or if it is something that only results in complete devastation. Invite students to share their work with others and perhaps suggest that all pieces can be published and made into a class book.

Kakadu Man by Bill Neidjie

I his earth ...
I never damage,
I look after.
Fire is nothing,
just clean up.
When you burn,
new grass coming up.
That mean good animal soon ...
Might be goose, long-neck turtle, goanna, possum.
Burn him off ...
new grass coming up,
new life allover.

Lesson 6: Marysville reflection/ bushfire ecology

This lesson falls into the going further stage of inquiry.

Students start this lesson reflecting on their visit to Marysville. What struck them about the excursion? Were they surprised by the amount of destruction, the photos, the rebuild, the resilience of people? What important messages did they get? What management decisions have had to be made when it comes to rebuilding Marysville (should we rebuild at all, what specifications to build to etc).

To consolidate an aspect of the excursion which we feel will particularly appeal to students, they will then use the Steveanson Falls redevelopment as a case study and identify what happens to plants, animals and ecosystems after a fire and the immediate and longer-term risks to the environment. Each student will be given a piece of paper and divide it by half. On one half they will be asked to draw an example of the vegetation or forest after a bushfire and label the picture to indicate the fire's effects on the forest. On the other half, each student draws what they assume the same area might look like after a year has passed.

Show the students a number of sequenced photos (pages 8, 13, 21-23), from the DSE Fire: Ecological Recovery booklet (2010) http://bit.ly/19lEryG) and the Bushfire Education resource kit (VCAA, 2011d) (http://www.bushfireeducation.vic.edu.au/resources-gallery/resources-gallery-all.html/page/3). Compare students drawings to the photos and discuss the similarities and differences.

Ask students for examples of bushfire recovery from their excursion, ensuring that they are reminded of the Black Saturday exhibition's photo essay of animals affected by the fires and the examples of regrowth at Steveanson Falls. Show examples from the exhibition of animals that have been affected.

Discuss how animals immediately respond to fire and what options they have to escape. Provide examples of how plants adapt after bushfires. Using the DSE Fire: Ecological Recovery booklet (2010), have students make a connection between the plants in the environment and the animals that rely on those plants and develop a timeline of recovery for the Steveanson Falls starting with the day after the bushfire event, listing short term, medium term and long term changes. Students should provide drawings or images of the relevant plants and animals clearly marked on the timeline.

Lesson 9: Moving on

This lesson fits into the reflection stage of inquiry.

In this class, students reflect on their learning by completing a questionnaire about the unit (page 70). They use 2-3 key ideas/learnings from the Unit and produce a piece of artwork, written work or new media, which draws together their learnings from this Unit. They will be asked to use an artifact from their visit to Marysville, either incorporated in their work or as inspiration for their work, but students will be encouraged to think more broadly than just of their visit to Marysville.

Students will be given free rein to decide what medium to use to display their learning, but suggestions will be made including a collage of objects and words, a newspaper article on the fires, a podcast, a piece of creative writing, a photo diary, or an art work inspired by what they saw at Marysville and what they have learned. Students will be encouraged to think deeply about what they produce and the teacher will provide small group and one on one conferencing to ensure each student is bringing their learning together in their work. Students will be encouraged to write a few sentences to explain their thinking.

This work, which can be completed over two weeks with some additional time given in class, will be assessed.

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Natural Disasters Inquiry Unit - Reflection Questionnaire

Which activities/lessons did you enjoy the most? Why?	
Identify and name at least 3 main ideas learnt through these activities/lesson.	
Is there anything you would like to investigate or explore further as a result?	
Which activities/lessons did you find most challenging? Why?	
Do you have any other general comments with regards to the overall Unit?	

Lesson 10: How to create a fundraising initiative?

This lesson forms part of the taking action component of the inquiry unit.

Students watch an ABC (2013) news video http://www.abc.net.au/lateline/content/2013/s3756872.htm and learn how 50 per cent of students affected by the Black Saturday fires are still struggling from Post Traumatic Stress Disorder (PTSD). Despite the reality, there is no more funding left to provide support for these students. In this video, a school principal and students recount their own personal experiences of Black Saturday bush fires and the ongoing symptoms they are experiencing.

Brochures on the fundraising campaign, Smouldering Stumps, which raises funds to support the youth affected by post-traumatic stress from the Black Saturday fires, are given out in class and discussed together.

The teacher discusses with the class why it would be beneficial to support this campaign and then scaffolds with the class ideas and strategies that would be needed to create and implement a fund raising campaign within their own school community. An example for a campaign is demonstrated in class. For example, a day is nominated when school students wear casual clothes and donate a gold coin to the Smouldering Stumps campaign. Students discuss the strategies they would need to implement to inspire the school community to become enthusiastic and involved. Organisational issues are discussed and mapped on a class tree graphic organiser such as: planning dates, advertising strategies i.e. posters, newsletter articles, individual student notices and announcements made in assembly.

The class then breaks into small groups and each group respectfully discusses and decides upon an idea for a fund raising campaign within their school community using an appropriate graphic organiser to map out the strategies and processes needed.

The groups then share their ideas with the class and the class works as a community organisation to discuss the strengths and limitations of each idea and, with scaffolding from the teacher, the class decides together upon the best idea for a fund raising campaign to support Smouldering Stumps. The class then works together as a team, and model for a community organisation, to create a flow chart of steps to take to organise this action to occur within their school community.

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