



## FINDINGS

# Learner agency is an essential element of effective bushfire education for upper primary school children.

## Problem-based learning for bushfire safety

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### BUSHFIRE EDUCATION FOR KIDS: A MANIFESTO FROM HARKAWAY PRIMARY SCHOOL

*All of us at Harkaway Primary School would like to say thank you to the Bunurong and the Wurundjeri people - tribes of the Kulin nation - for letting us share your land. We promise to look after it – the people and animals too.*

*We promise to care for: The Land, the Sky, Ourselves and Each other.*

**1. WE NEED TO LEARN ABOUT BUSHFIRE SAFETY.** Bushfires can be very dangerous. People need to have a good understanding of bushfires and how to survive. Otherwise, when there is a bushfire, there will be more casualties and more deaths. It will be more catastrophic. Kids also need to know what to do to be safe and they need to learn it from a young age. When kids learn about bushfire safety from a young age, they can grow up knowing about their environment. Most people don't know about bushfires because they didn't learn about it when they were kids. If a bushfire is happening, kids need to know what they can do so they can stay calm and help their parents, instead of the parents doing everything and the kids just going "ARGGHH". When kids know what to do, there will be more hands on deck and everyone will be safer. **2. WE WANT TO MAKE DECISIONS ABOUT OUR OWN LEARNING AND ACTION.** Kids have really good ideas and sometimes we see problems and risks that adults don't see. We also know what kind of action is possible for us to achieve at home, at school and in our community. If we can make decisions about our own learning and action, we can solve real problems that matter to us. We all learn differently and we have our own special interests and talents. When we can make decisions about our own learning and action, we can achieve more than if we are just told what to do. We also work harder to succeed because we are doing what we are good at and what we enjoy. We also need to learn at our own pace - learning about bushfires can be overwhelming and sometimes we need to slow things down a bit or take a break to let it all sink in. When we learn at our own pace, we can get a better understanding of complicated information. We need independence. We need to figure out how to learn and discover stuff on our own. We just need the adults there to guide us, put us on the right track and help us if we get stuck. We can do the rest. **3. WE NEED ACCESS TO TRUSTWORTHY INFORMATION FROM EXPERTS.** There is a lot of information about bushfires on the internet, but sometimes the information we are looking for isn't available or it's not explained in ways that we can understand. If we can talk to experts, we can get the information we need and it can be explained to us in ways that make sense. We really want to learn from Aboriginal people too because they have been here for a really long time and they know so much. We also need feedback from experts to make sure we understand things correctly. Bushfire safety is serious and we need to make sure we've got our facts right, especially if we want to share our knowledge with other people. People who are experts can check our work and help us fix problems and mistakes before we go any further. When we learn from experts, we are more confident about sharing information with other people. If our parents or other people don't believe what we say, we can tell them that our information has come from experts that we talked to at school. If we have learned from experts, people will trust us and take us more seriously. **4. WE WANT TO TEACH OTHERS.** A lot of people don't know very much about bushfire safety. Most kids don't know anything at all. We want to help educate everybody - our families, our teachers, and the other kids at our school. We also want to educate kids from other schools. There is a thing called 'Kids Teaching Kids' and it's really good because kids know what other kids know and don't know. Kids can explain things in ways that are easy for other kids to understand. We can tailor information to fit with kids' perspectives. We can make videos, posters, and books to help get important information to people who need it. We can run workshops and give presentations. Teaching others improves our own learning. Sometimes you don't know how much you know until you try to teach someone else, so it's a good way to find out if you actually know what you think you know. Also, teaching others can show us that we have really learned a lot and that makes us feel proud. We can also help teachers and fire agencies create better bushfire education programs for kids. We can tell them what is important to us because we are experts in our own lives and we can show them the best ways to teach us because we are experts in our own learning.

### Introduction

To support the implementation of effective bushfire education in Australian schools, emergency management agencies and other organisations have developed a range of programs and resources, some of which have been evaluated as part of the BNHCRC Child-Centred Disaster Risk Reduction Project. Those evaluations have pointed to the value of participatory pedagogies that afford students a high level of learner agency in the education process. Learner agency refers to the level of autonomy and power that a student experiences in the learning environment.

This explanatory case study sought to establish how problem-based learning (PBL) can be used to promote learner agency in bushfire education and support children's genuine participation in bushfire safety initiatives at home, at school and in the wider community.

### Methodology

The case study was conducted with two Grade 5/6 classes at Harkaway Primary School on Melbourne's peri-urban fringe. Consistent with good practice in PBL, the process began with a broad exploration of the various factors that contribute to bushfire risk and the students were challenged to ask a multitude of questions. In small groups, the students then identified a local problem of concern, planned their inquiries, collected and compiled information, reflected on their findings, designed a solution, and shared that solution with a wider audience of vested interest. Throughout that process, ethnographic research methods - focus groups, semi-structured and informal interviews, participant observation - were employed to gather data on the learning process from the perspectives of students and their teachers. Upon completion of the unit, key findings were shared and validated with the students in a participatory workshop.



### Results and discussion

Through their engagement in the PBL process, the students identified a wide range of problems to be solved. These included low levels of bushfire knowledge, awareness, planning and preparedness, particularly amongst children. To address these problems, the students designed a suite of educational materials and activities to help children and families gain a better understanding of local bushfire risks and get prepared for the bushfire season. Ethnographic data collected during the process identified several factors that promoted learner agency and provided students with a learning experience that was purposeful, meaningful and relevant in the context of their own lives. These factors are encompassed in 'Bushfire Education for Kids: A Manifesto from Harkaway Primary School', which was developed by the students upon completion of the PBL unit and will now be used by the school to inform the design and implementation of bushfire education going forward. The Manifesto and other research outputs are also being used by state fire agencies to inform the development of a new bushfire education program for high risk schools in Victoria.