



CHILD-CENTERED DISASTER RISK REDUCTION

Research advisory forum / 2019

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Business
Cooperative Research
Centres Programme



Project objectives

- Build an evidence-base that can inform the design, implementation and evaluation of Disaster Resilience Education (DRE) for Australian children and young people.
- Provide end-user agencies and other key stakeholders with practical guidance and tools for the development and continuous improvement of evidence-based DRE policy and programming.
- Advocate for DRE as a key mechanism for disaster risk reduction and the development of disaster resilient community.

Research Team

Dr Briony Towers, RMIT University
Prof Annette Gough, RMIT University
Belinda Davis, RMIT University

Prof Kevin Ronan, CQUniversity
Ass. Prof Eva Alisic, University of Melbourne
Dr Katharine Haynes, University of Wollongong
Dr Marla Petal, Save the Children
Nick Ireland, Save the Children
Prof David Johnson, Massey University

End-User Agencies



PHD Students

Avianto Amri, Macquarie University

Connecting communities: Integration of disaster preparedness measures at household, school and community level using a child-centred approach.

Revathi Krishna, Monash University

Coping with disasters by children and families who live in poverty.

Tony Jarrett, CQUniversity

Agency experts supporting disaster resilience education with primary school students: A case study of New South Wales, Australia.

Mayeda Rashid, CQUniversity

Disaster Resilience Education for Children: A Study in Bangladesh.

Andrew Clarke, CQUniversity

A Mixed Methods Evaluation of the effectiveness of key safety messages in dealing with stressful structural fire environments.

Matthew Henry, PhD Candidate, CQUniversity

Comprehensive school safety: A participatory approach to school emergency management planning.



Disaster Resilience Education

A Practice Framework for Australian Emergency Management Agencies

Core Dimensions

Design

Program aims and objectives
Teaching and learning activities
Methods of assessment

Implementation

Professional development
Curriculum integration/reform
Comprehensive School Safety

Monitoring & evaluation

Outputs: Scalability, sustainability
Process: Program fidelity, adaptation
Outcomes: Learning and DDR outcomes
Impacts: Reduced harm, damage and loss.



Guiding Principals

Collaboration & partnership

Emergency Management Sector
Education Sector
Academia
Children, youth and families

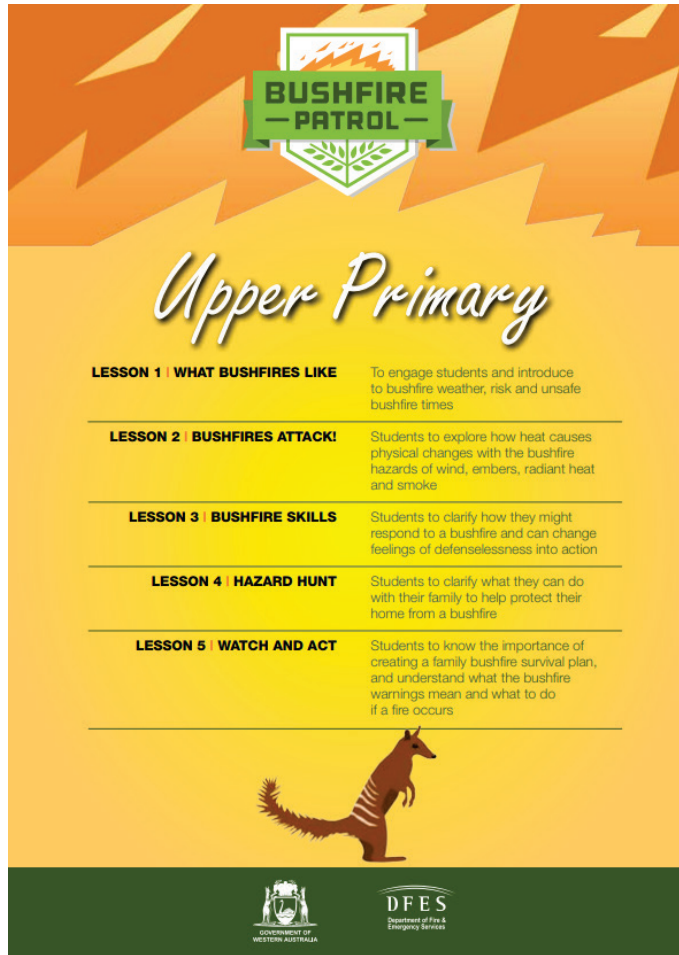
Diversity & inclusion

Disability
Cultural and linguistic diversity
Social & economic disadvantage
Urban, rural and remote

Protection & participation

UN Convention on the Rights of the Child
UN Sendai Framework
Student voice and agency

Evaluation of Bushfire Patrol (WA DFES)



AIMS

- Evaluate the influence of the program on student knowledge and awareness, and levels of planning and preparedness in their households.
- Explore teachers' perspectives on the strengths and weaknesses of program design and implementation.

METHODOLOGY

- Mixed-methods evaluation of process and outcomes among students and households on the Perth RUI.
- Pre-test post-test interviews with Grade 5 students (n=48).
- Ex-poste semi-structured interviews with teachers (n=2) and parents (n=10).

KEY FINDINGS

- 32 specific recommendations relating to program objectives, lesson structure and content, teaching and learning approaches, methods of assessment, curriculum integration, and home-based activities.
- Valuable insights into children's interpretations of fire danger ratings, bushfire alerts and the 'leave early' message.

UTILISATION

- Findings used to inform the systematic redevelopment of the Bushfire Patrol program for Upper and Middle primary students.
- Adoption of a module-based approach (i.e. core and extension modules).
- New version launched online in December 2018.

Evaluation of Survive and Thrive (CFA)

AIMS

- Determine program outcomes at the child, household and community level.
- Identify mechanisms and processes that contributed to those outcomes.

METHODOLOGY

- Mixed-methods summative evaluation in Anglesea and Strathewen.
- Surveys/focus groups with current students (n=16) and past students (n=7).
- Surveys and semi-structured interviews with parents (n=12).
- Semi-structured interviews with teachers (n=3) and agency staff/volunteers involved in program implementation (n=12).
- Key informant interviews with community engagement and child-centred DRR specialists (n=4).

KEY FINDINGS

Outcomes:

- Increased knowledge and awareness of local bushfire hazards, bushfire planning, preparedness, and response amongst students.
- Increased knowledge, awareness, planning and preparedness within households.
- Increased child participation in household planning and preparedness.
- Increased capacity for household emergency response.
- Strengthened brigades and relationships (agencies, schools).

Contributing mechanisms and processes:

- Community-based partnerships between the local brigades and the schools.
- Strong commitment of local agency staff, volunteers and teachers.
- Extended period of delivery for each student cohort (approx. 2 years).
- Placed-based, experiential and participatory approaches to teaching and learning.

UTILISATION

- Agencies are inspired but utilisation is a slow burn!



The Disaster Resilience Project (CFA/SES)

A feasibility and acceptability study

AIMS

- Determine the feasibility and acceptability of program format, structure, content, and implementation strategy from the perspectives of teachers and students.

METHODOLOGY

- Ex-poste focus groups with year 7/8 students in two Victorian secondary schools (n=128).
- Ex-poste semi-structured interviews with their teachers (n=4).

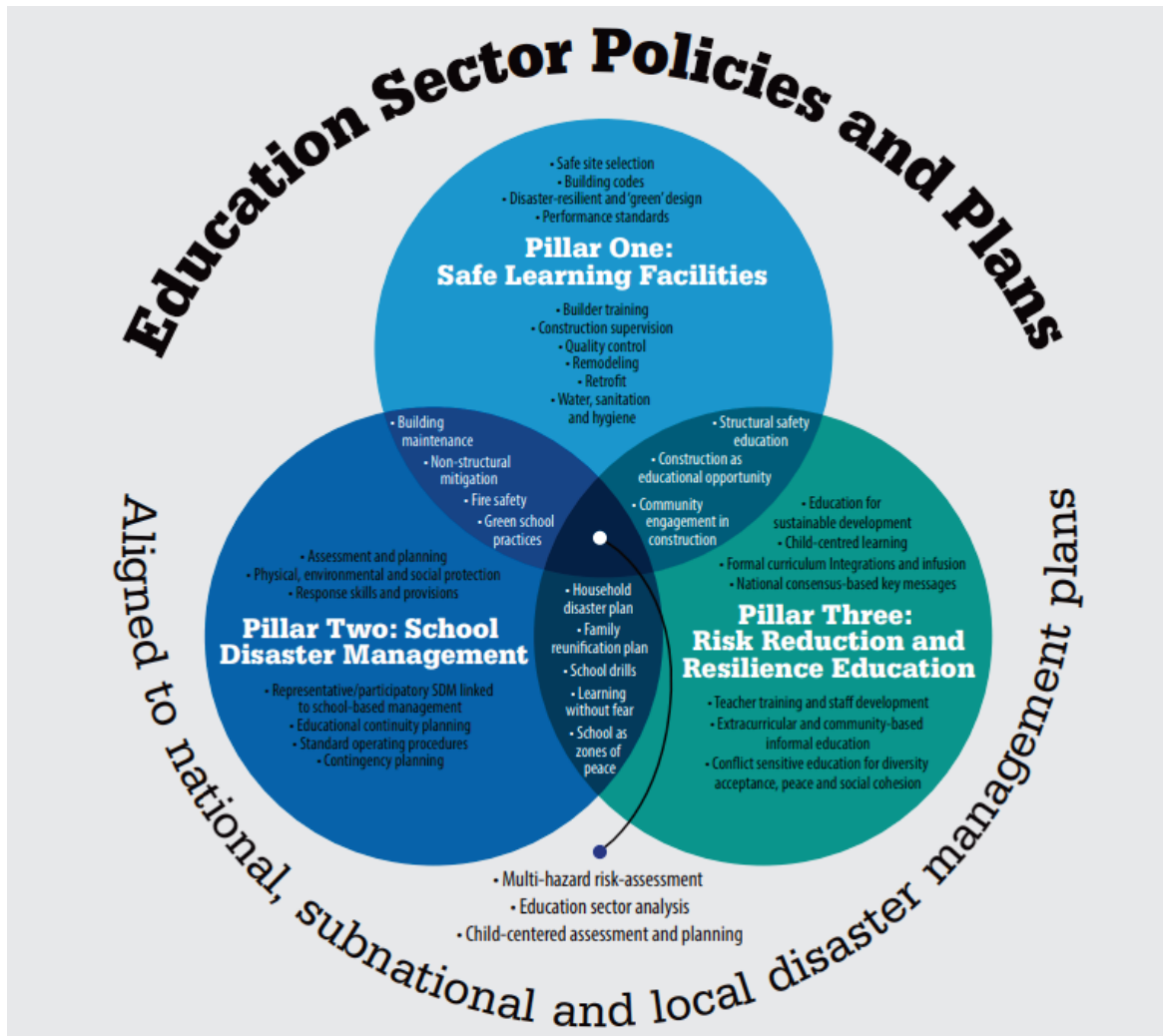
KEY FINDINGS

- Program provided students with valuable knowledge and skills that they could apply to DRR and resilience building activities in their households and communities.
- Program resources and professional development session increased teacher capacity and capability for DRRRE delivery.
- Numerous strengths and weaknesses in relation to specific learning intentions, teaching and learning activities, and methods of assessment.

UTILISATION

- Recommendations of students and teachers used to inform the final version of program (modification of existing structure and content, development of additional resources).
- Program now accessible online for use in Victorian secondary schools (but no formal implementation strategy).
- Program format, structure, content and implementation strategy has been adopted by Tasmania Fire Service.

Development of a national strategy for DRE implementation



AIMS:

- Identify existing emergency management planning policies and documentation requirements in schools and the role of emergency services in the fulfilment of those requirements.
- Identify opportunities for integrating CSS (particularly pillars two and three) into the school curriculum.
- Develop a framework which integrates child-centred community-based DRE with school emergency management planning.
- Investigate the acceptance of the framework to State and Territory education authorities.

METHODOLOGY

- Key informant interviews and workshops with representatives from the emergency management and education sectors.

Problem-based learning for DRR

AIM

To establish how PBL can be used to support children's agency in learning and action for bushfire safety and position them as agents of change in their schools, households and communities.

METHODOLOGY

- Ethnographic case study of grade 5/6 PBL unit on bushfire safety.
- Participant observation of classroom activities
- Student focus groups, peer-to-peer interviews, video diaries, informal interviews.
- Semi-structured interviews with teachers.
- Semi-structured interviews with parents.



Disaster Risk Reduction and Resilience Education

A Practice Framework for Australian Emergency Management Agencies

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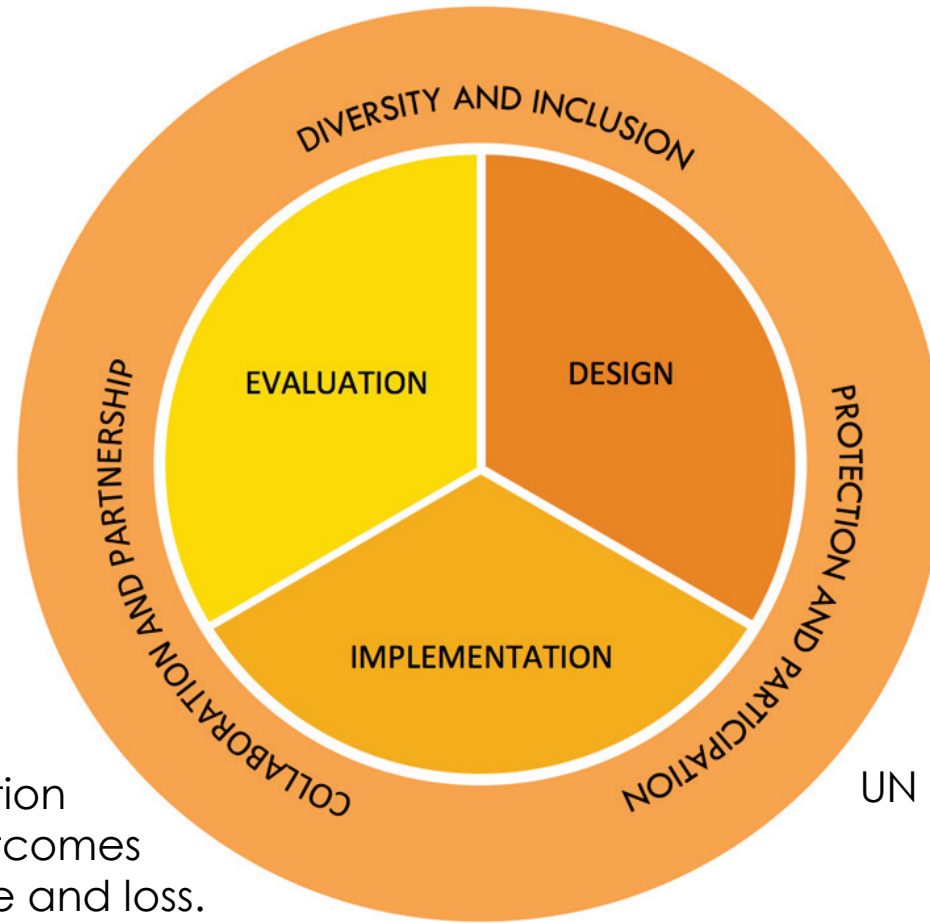
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