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## HELPING AGENCIES LEARN FROM EXPERIENCE

### ABOUT THIS PROJECT

This research was part of the *Improved decision-making in complex multi-team environments* project.

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### SUMMARY

The ultimate aim of this research is to help emergency management staff and volunteers to function more effectively in increasingly complex environments. Its overall approach is to help agencies to 'learn how to learn', so they understand how to embed effective learning practices and systems into their organisation's culture. The experiential learning model, which is grounded in real-world experiences rather than classroom training, is a key focus of this *Hazard Note*.

Broad challenges have been identified that agencies need to manage in order to enhance and sustain learning. These include shifting value from action post an



▲ **Above:** THIS STUDY IS INVESTIGATING HOW ORGANISATIONS CAN IMPROVE THEIR CAPACITY TO LEARN THROUGH EXPERIENCE. PHOTO: NEW ZEALAND FIRE SERVICE

event, to reflection, focusing on the bigger picture and allowing enough time to effectively embed the new practices after an emergency.

No organisation can forgo learning. All experiences provide opportunities

for learning to occur. A key insight for agencies interested in facilitating improvements in learning is to locate potential weak links in the learning cycle and to develop a better understanding of how to learn.

### CONTEXT

In emergency management internationally, the drive to learn is growing. This increasing interest is evidenced by a search for the terms 'learning lessons' and 'emergency management' in a publications database. Of the 266 publications identified by this search, more than half had been published in the past five years.

### BACKGROUND

Learning in emergency management organisations occurs in a range of contexts. These include after-action reviews, externally led inquiries, and practice-led research projects.

But how do emergency management practitioners learn in these various settings? This research is investigating how

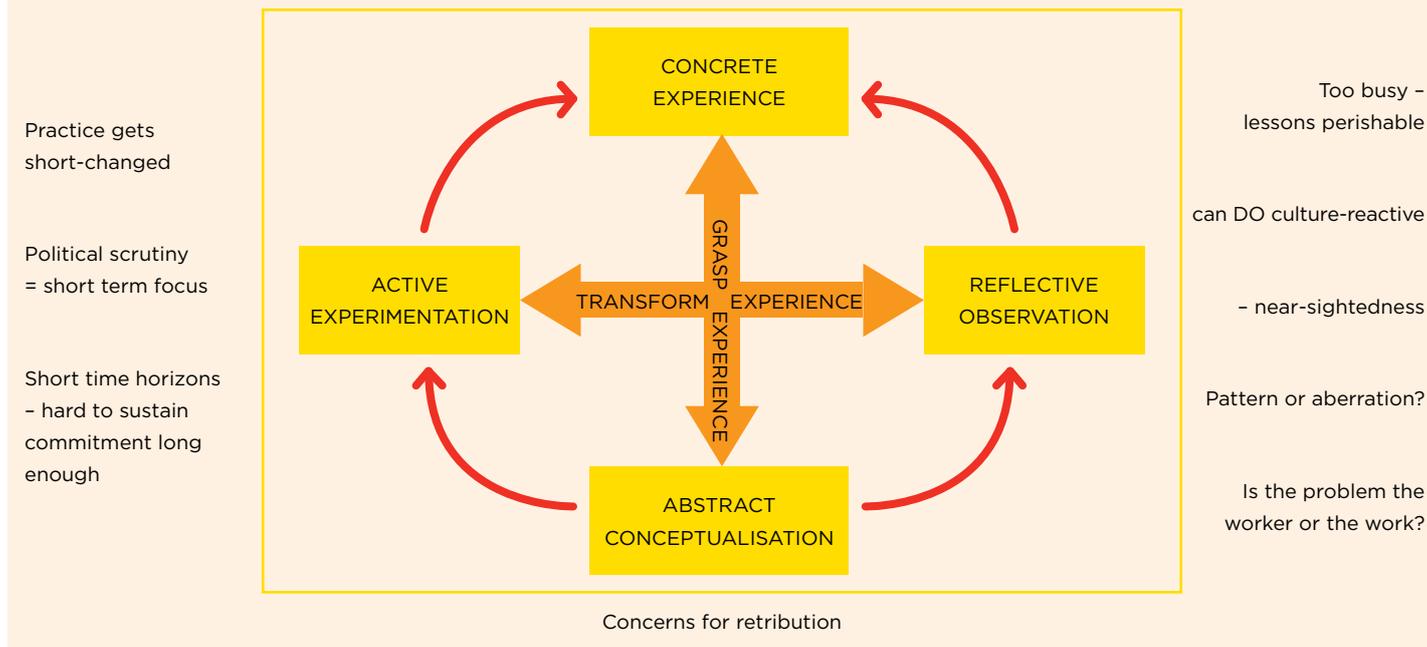
organisations can improve their capacity to learn through experience. It focuses on how they review and evaluate their past performances, and how they monitor any changes that are based on their insights. This research is meeting a critical need: translating research outcomes into practice is complex and typically beyond the control of both researchers and emergency managers.

In previous research, the project group (see Owen *et al.*, 2015), had found that many agencies were actively working to identify learning opportunities. The agencies also evaluated research insights and their implications for reinforcing or changing current practices. However, while agencies were developing 'lessons learned' frameworks, these frameworks

were not always effective in translating research outcomes into practice. This is because, too often, the structures for managing lessons were disconnected from the structures for reviewing and evaluating research. That is, there was no channel between research outcomes and lessons management.

These observations align with this study's literature review, which showed that many of the 'lessons learned' publications fall into a theme that this project's researchers have dubbed 'the creation myth' (see for examples of this Farazmand, 2007; Kenney *et al.*, 2015). In this scenario, researchers review a crisis event, publish their insights, and assume that the act of publication itself signifies that 'lessons' have now been learned.

## CHALLENGES FOR EMERGENCY MANAGEMENT AGENCIES



▲ **Figure 1:** THE EXPERIENTIAL LEARNING CYCLE AND SOME CHALLENGES FOR AGENCIES TO LEARNING.

Other literature themes included how emergency services organisations are establishing processes for managing and learning from lessons (see Jackson 2016), why learning is so hard and, some argue, almost impossible (see Birkland 2009; Donohue & Tuohy 2006).

## BUSHFIRE AND NATURAL HAZARDS CRC RESEARCH

The research for this component of the project started in 2015 with a literature review and interviews with 18 end-user agency personnel from South Australia, New South Wales, Victoria and Tasmania to ascertain their strategies for learning from incidents. This *Hazard Note* reports on the next stage of the research, which further investigates the experiential learning model. This model highlights the ways in which experiences - including from after-action reviews, research projects or other types of inquiries - may support learning.

The experiential learning model, developed by David Kolb (2014) and adapted by Christine Owen (2017), was selected because of several key factors. It grounds learning in actual experiences rather than classrooms or training environments. It is well established in both education and organisational learning. It draws upon the ways people in organisations may experience problems and then learn from them. Kolb's model is based on explicit processes that are necessary for effective learning. Its useful framework explains the



▲ **Above:** EXPERIENCES SUCH AS OPERATIONS, AFTER-ACTION REVIEWS, RESEARCH PROJECTS OR OTHER TYPES OF INQUIRIES CAN ALL SUPPORT LEARNING. PHOTO: SOUTH AUSTRALIA SES

phases of learning that personnel may seek in a range of work activities.

The model suggests that learning results from a resolution of a contradiction or conflict between opposing ways of dealing with the world. That is, between reflection and action on one hand and between doing and thinking on the other. Beneath these processes is the notion of both apprehending (initial sense-making based on experience) and comprehending

(understanding and improved action - see Figure 1). An impetus for learning can start anywhere, for example, through reflecting on an experience, considering a problem or trial-and-error experimentation. The key is that all four elements indicated in the learning cycle in Figure 1 are important if learning is to lead to a change or a reinforcement of existing ways of acting - because the practitioner now better understands why these actions work.



▲ **Above:** THIS RESEARCH WILL HELP EMERGENCY MANAGEMENT STAFF AND VOLUNTEERS FUNCTION MORE EFFECTIVELY IN INCREASINGLY COMPLEX ENVIRONMENTS.

## RESEARCH FINDINGS

Based on the study's interviews with practitioners involved in lessons learned, after-action reviews or research-usage activities, the researchers have identified broad challenges that agencies need to manage in order to enhance and sustain learning (indicated in Figure 1).

### Valuing action over reflection

Staff often lack adequate time to reflect on and gain meaning from their experiences. Their potential insights may then be lost rather than embedded in their organisation's practices. Reflection can also be inhibited by a tendency to focus on the immediate and the tangible, which is reinforced by the 'can-do culture inherent in many organisations that encourages action, sometimes at the expense of reflection.

### Blind to the big picture

When emergency agencies do reflect on their experiences, their vision may be too near-sighted, focusing on the individual as the aberration, rather than identifying

## END-USER STATEMENT

This research provides evidence that will help lessons practitioners across the emergency services ensure that lessons from events and experiences are learned. The model developed helps to articulate some of the barriers to organisational learning that most emergency service agencies are struggling with. Agencies will be able to utilise this research to inform the development of strategies to address some of these barriers, which will help them move from merely identifying lessons to achieving changes in behaviour. Then we will truly be able to say that lessons are being learned.

– **Heather Stuart, Manager, Knowledge and Lessons Management, NSW State Emergency Service**

broader, systemic problems. Where the focus is on individuals, the individual may fear possible retribution, and be less likely to voice concerns that could contribute to improved practices.

### Short term-ism

When organisations identify the need for changes and trial the changes, they may not allow enough time to effectively embed the new practices. This is exacerbated by the demands placed on staff, noted earlier. And when external pressures, including political

scrutiny, are the impetus for new practices, the changes may be short term, rather than sustained.

## HOW IS THIS RESEARCH BEING USED?

Facilitators who manage lessons could use this research to extract meaning from after-action reviews. The study's outcomes could also support staff who draw upon research implications to analyse their own organisations by



▲ Above: ALL EXPERIENCES PROVIDE OPPORTUNITIES FOR LEARNING TO OCCUR. PHOTO: SOUTH AUSTRALIA SES

asking: how is the experiential learning cycle being managed? How are the processes of reflection, sense-making, and experimentation being fostered, to support new ways of working?

The literature review and research interviews identified many strategies for improving organisational learning. These included: embedding roles and responsibilities for learning, review and follow-up; monitoring and measuring change; and linking learning and practice.

They also suggest that crises could offer opportunities that support learning by exploiting political attention, and drawing knowledge from low-complexity, low-risk events.

Another key strategy is to invest in quality, rather than quantity. This translates into fewer exercises but better training that is well targeted at clear objectives.

## FUTURE DIRECTIONS

The next phase of the project is to trial and test a research-utilisation maturity matrix, in collaboration with lessons learned practitioners and end-user agencies. AFAC's Knowledge Innovation and Research Utilisation Network is currently trialling the matrix.

The matrix will assist agencies to more systematically assess and evaluate their own internal processes to support learning and change. This engagement will be written up in a way that other agencies may be able to use and to learn from.

No organisation can forgo learning. All experiences provide opportunities for learning to occur. A key insight for agencies interested in facilitating improvements in learning is to locate potential weak links in the learning cycle and to develop a better understanding of how to learn.

## FURTHER READING

Birkland T (2009), 'Disasters, lessons learned, and fantasy documents', *Journal of Contingencies and Crisis Management* **17**(3), pp. 146-156.

Donahue A and Tuohy R (2006), Lessons we don't learn: A study of the lessons of disasters, why we repeat them, and how we can learn them, *Homeland Security Affairs*, **2**(2).

Farazmand A (2007), Learning from the Katrina crisis: A global and international perspective with implications for future crisis management, *Public Administration Review* **67**, pp. 149-159.

Kenney CM, Phibbs SR, Paton D, Reid J and Johnston DM (2015), Community-led disaster risk management: A Māori response to ōtautahi (Christchurch) earthquakes, *Australasian Journal of Disaster and Trauma Studies* **19**(1), pp. 9-20.

Jackson LM (2016), The influence of organisational culture on learning lessons: Implementing a lessons management life cycle, *The Australian Journal of Emergency Management* **31**(1), pp. 18-23.

Kolb DA (2014), *Experiential learning: Experience as the source of learning and development*, Indianapolis: Pearson FT press.

Owen C, Bearman C, Brooks B, Curnin S, Fitzgerald K, Grunwald J and Rainbird S (2015), *Decision making, team monitoring and organisational performance in emergency management*, Bushfire and Natural Hazards CRC.

Owen C, Krusel N and Bethune L (2016), *Report on Research Utilisation Review for AFAC and the Bushfire and Natural Hazards CRC*, Melbourne.

Owen C (2017), *Ghosts in the machine: Organisational culture and air traffic control*, New York: Taylor and Francis.

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*Hazard Notes* are prepared from available research at the time of publication to encourage discussion and debate. The contents of *Hazard Notes* do not necessarily represent the views, policies, practises or positions of any of the individual agencies or organisations who are stakeholders of the Bushfire and Natural Hazards CRC.

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