

Learning by doing

and
After Action Reviews (AAR)

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EMTRAIN

Fire and Community Safety

Acknowledgement

Photos herein have been provided by Mr. Des Stott and have been used with permission of Macclesfield Fire Brigade in Victoria.

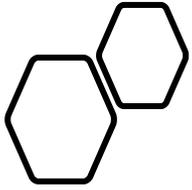
Images of animals have been used to provide the operational context to which this presentation was aimed. Please be aware that viewing these images may cause distress to some, and care should be taken before proceeding.

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Short discussion topics

- What is learning by doing?
- The lessons learned approach; and Becoming a learning organisation
- After Action Review (AAR) process





**What is learning by
doing?**



Learning by doing

Is a hands-on approach to learning, meaning students must interact with their environment in order to adapt and learn

We learn more easily when we remember information through different ways of learning

Learning by doing can also be used to describe

- Experiential Learning
- Situated Learning
- Action Learning

Who coined the phrase 'learning by doing'?

- Learning by doing refers to a theory of education expounded by American educational reformist John Dewey, (1859 – 1952)

Tell me, Show me, Involve me!!

- Tell me and I will forget
- Show me and I might remember
- Involve me and I will learn

Three main styles of learners

- Visual

Three main styles of learners

- Visual
- Auditory

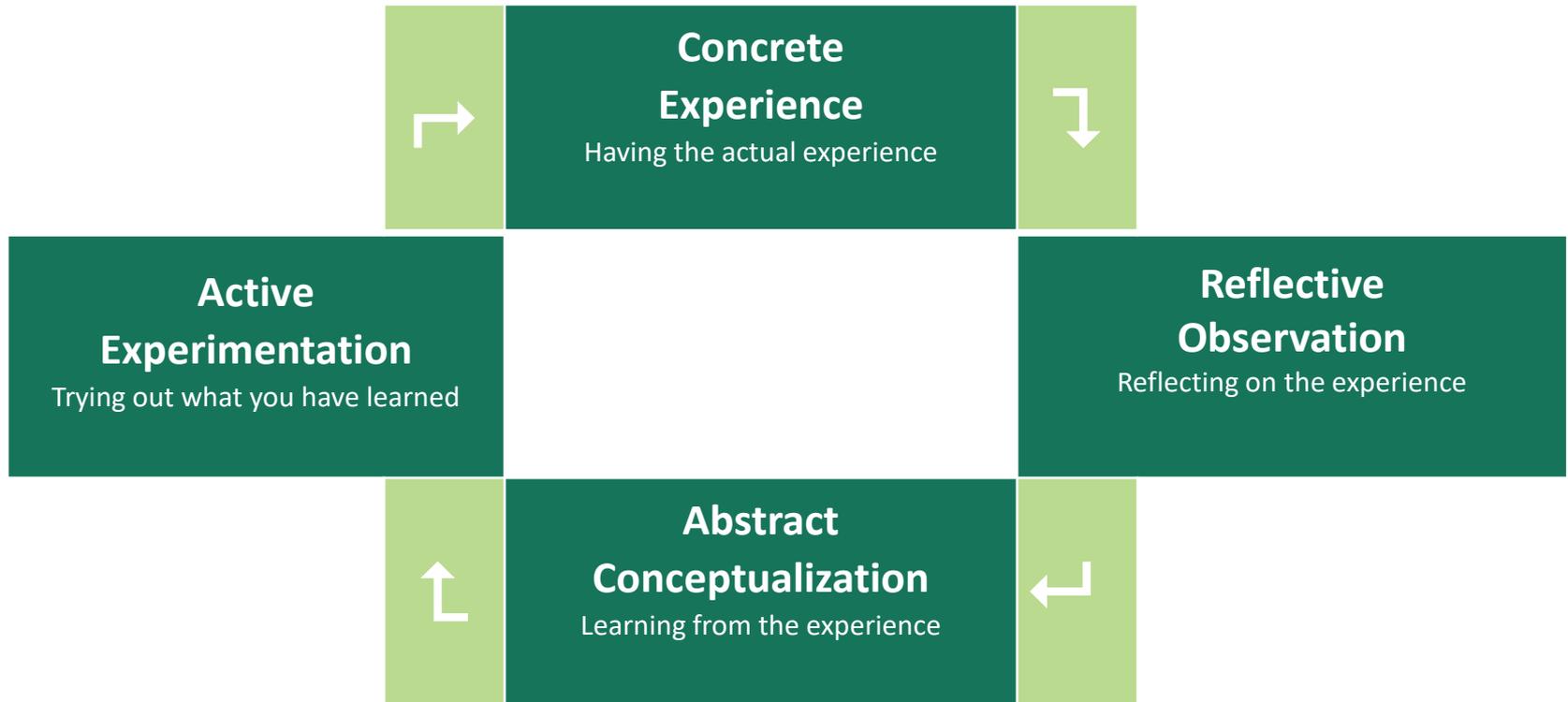
Three main styles of learners

- Visual
- Auditory
- Kinesthetic

Experiential Learning Theory

- Students are encouraged to learn through experiences that can help them retain information and recall facts.
- Experiential learning theory was identified by American educational theorist David Kolb in 1984.

Kolb's Experiential Learning Model (1984)



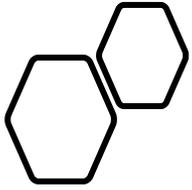
In summary

- Tactile learners learn by touching and doing
- Understand and remember through physical movement
- Learn better when some type of physical activity is involved

In summary

- We don't just learn from our experience, rather we learn from reflecting on that experience
- When we don't have experience, we can always learn from reflecting on the experience of others

This is called the “lessons learned approach”.



The lessons learned
approach; and
Becoming a learning
organisation



The lessons learned approach; and Becoming a learning organisation

Lessons learned approach is based on the acquisition and transfer of experiences and ideas for improvements

Learning organisations are those that are skilled at creating, acquiring and transferring knowledge, and at modifying its internal behaviors to reflect new knowledge and insights

Lessons learned: Purpose

Is to provide future teams and individuals with information that can increase effectiveness and efficiency, and to build on the experience that has been gained by each completed activity

Lessons learned: Outcomes

Is to provide future teams and individuals with information that can increase effectiveness and efficiency, and to build on the experience that has been gained by each completed activity

- Improved team and individual performance
- Builds trust in work teams and groups
- Increased safety

Learning organisations defined

What is organisational learning?

“Organizational learning means the process of improving actions through better knowledge and understanding.”

C. Marlene Fiol and Marjorie A. Lyles, “Organizational Learning,” *Academy of Management Review*, October 1985.

“An entity learns if, through its processing of information, the range of its potential behaviors is changed.”

George P. Huber, “Organizational Learning: The Contributing Processes and the Literatures,” *Organization Science*, February 1991.

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Learning organisations defined

What is organisational learning?

“Organizations are seen as learning by encoding inferences from history into routines that guide behavior.”

Barbara Levitt and James G. March, “Organizational Learning,” *American Review of Sociology*, Vol. 14, 1988.

“Organizational learning occurs through shared insights, knowledge, and mental models...[and] builds on past knowledge and experience—that is, on memory.”

Ray Stata, “Organizational Learning—The Key to Management Innovation,” *Sloan Management Review*, Spring 1989.

Learning organisations defined

What is organisational learning?

“Organizational learning is a process of detecting and correcting error.”

Chris Argyris, “Double Loop Learning in Organizations,” *Harvard Business Review*, September–October 1977.

Learning organisations are those that are skilled at creating, acquiring and transferring knowledge, and at modifying its internal behaviors to reflect new knowledge and insights

Learning organisations: The Senge Model

Popularised and promoted by American author Peter Senge in his book *The Fifth Discipline* (1990)

- Personal mastery
- Mental models
- Shared vision
- Team learning
- Systems thinking

Learning organisations: David Garvin 1993

Read Article by:

The late David A. Garvin (1952-2017) Professor of Business Administration at Harvard Business School

Building a learning organisation

<https://hbr.org/1993/07/building-a-learning-organization>

Macclesfield Fire Brigade: CFA Victoria
An example of a learning organisation

- Information is shared and accessible
- Learning is emphasized and valued
- Mistakes and failures are not punished, but 'unpacked' and lessons are learned and shared
- People are learning constantly and as a seamless process to their other firefighting work tasks
- Improved team performance is the order of the day and is everyone's aim
- Learning occurs on the job role as well as in the training room

'Hoss' the horse mannequin being used in the training room



Large animal rescue (LAR) incident: Cast horse on roadway



LAR Rescue officer and Vet working in unison



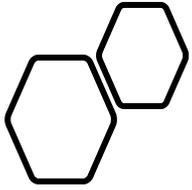
Patient in recovery mode



Post incident: Lessons learned exercise

What is a lessons learned exercise?

- A lessons learned exercise or meeting is a collaborative feedback session in which you document what your team took away from both the successes and an missteps of the incident
- These are short meetings and are a way to collect comments and observations and should always include everyone in the team



After Action Review (AAR)



What is an AAR?

An after action review (AAR) is a structured review or de-brief process for analysing what happened, why it happened, and how it can be done better next time around by the team and those responsible for the overall incident or event

AAR: Purpose

- An AAR is a method for extracting lessons from one action, incident or event, and applying the lessons learned to others
- It enables a team to analyse for themselves
 - what was supposed to happen?
 - what actually did happen?
 - why did it happen?
 - how can the team use their new understandings and learnings to sustain strengths and improve on any weaknesses in overall team performance?

Two types of AAR

- **Formal:** Requires planning and coordination, preparation of a suitable site to meet, may need supporting training aids or tools, and support personnel
- **Informal:** Requires less resources, less preparation and can usually be conducted in-situ at the incident or on return to home location

Cattle transport vehicle incident involving livestock

- The incident?
- Situation on arrival?
- Who was involved?





Conducting the AAR

Question 1:

- What was supposed to happen?

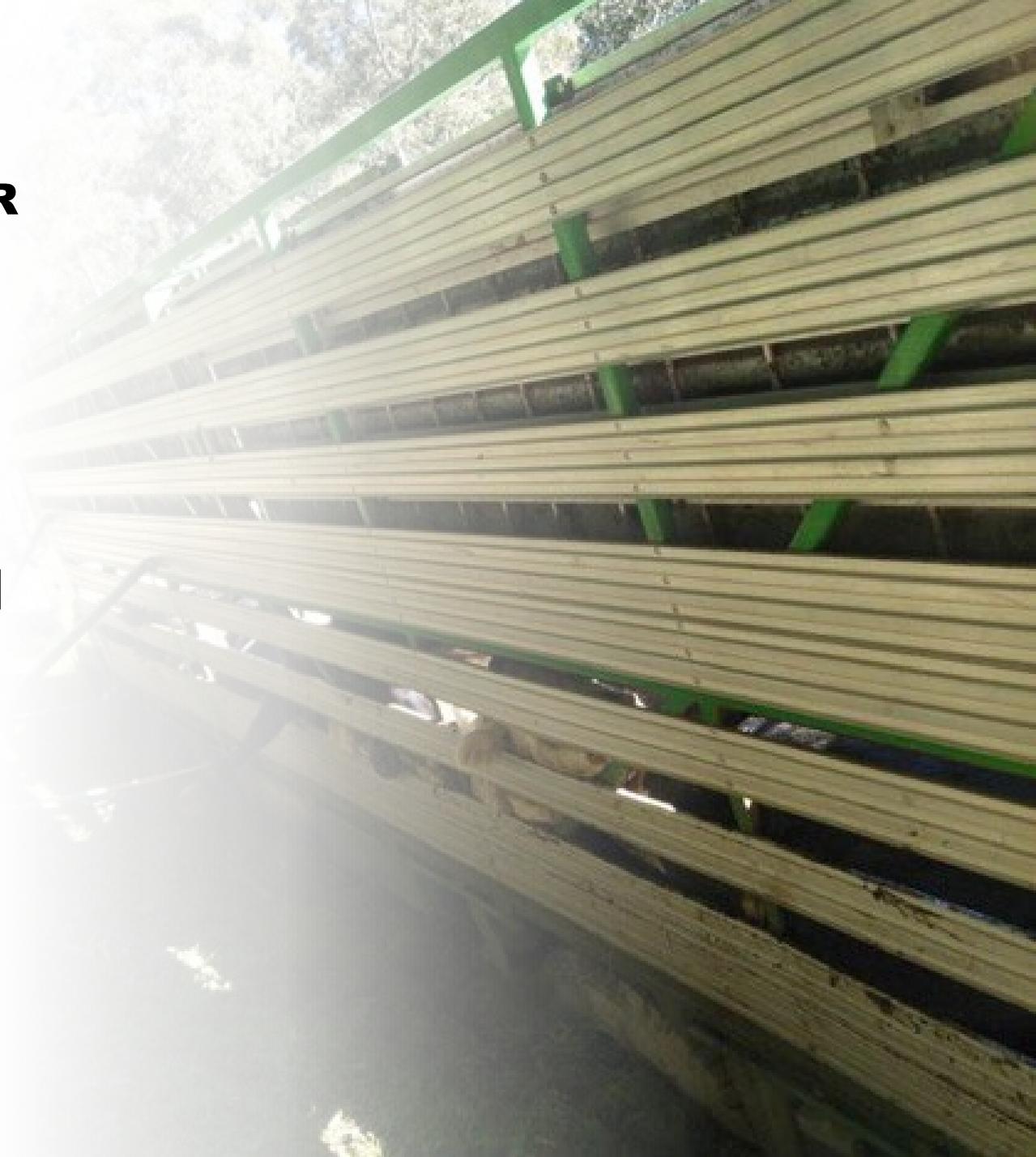




Conducting the AAR

Question 2:

- What actually did happen?



Conducting the AAR

Question 3:

- Why did it happen?



Conducting the AAR

Question 4:

- How can we improve on our team performance next time?



Thank you

Questions



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