WHITE PAPER

LEARNING FROM ADVERSE EVENTS

Chartered Institute
of Ergonomics
& Human Factors

Includes nine principles for incorporating human factors into learning investigations.

Principle 1:

Be prepared to accept a broad range of types and standards of evidence.

Organisations that are genuinely seeking to learn from incidents are prepared to accept the need for action and change based on informed judgements, rather than necessarily hard ‘evidence’, about why people at the sharp as well as the blunt end of the organisation may have behaved and acted in the ways they did.

Principle 2:

Seek opportunities for learning beyond actual loss events.

Near misses, close calls, anonymised reporting systems and sensitivity to weak signals from operations all provide opportunity for learning and continuous improvement.

Principle 3:
Avoid searching for blame.

Focusing on individual failure and blame creates a culture of concealment and reduces the likelihood that the underlying causes of events will be identified.

Principle 4:
Adopt a systems approach.

Serious adverse events can only be understood in terms of the overall socio-technical system in which the event occurred.

That means understanding and being open to the possibility of a need for change in any of the components of the system.

Investigating why the controls the organisation thought it had in place were not effective in preventing the event, can bring a lot of insight and learning about systemic issues.

Principle 5:

Identify and understand both the situational and the contextual factors associated with the Event.

Look beyond individual performance and actions, and explore the complex interplay between psychological, social and organisational factors that influence decisions and actions.

Consider how interactions between situational and contextual factors could lead to unexpected or undesirable human performance.

Principle 6:

Recognise the potential for difference between the way work is imagined and the way work is actually done.

Investigators must be sensitive to the fact that ‘work-as-done’ often diverges significantly from how work is documented in formal procedures, disclosed or prescribed.

The goal of learning is to improve work-as-done and then seek to better align how this is more accurately described and represented in formal procedures.

Principle 7:
Accept that learning means changing.

Lessons identified in an investigation report are not the same as lessons learned. If nothing changes in terms of the way the people in the organisation think, behave or react to future events and situations, nothing has been learned.

Though change, in itself, does not mean effective learning - change must be effective in implementing the intent of recommendations, must be understood and accepted by those affected by it, and must be embedded so it is sustained.

Principle 8:

Understand that learning will only be enduring if change is embedded in a culture of learning and continuous improvement.

This means a culture that is open and fair, where people value and are motivated to learn and make change for the better and where the entire organisation is engaged in the learning process; learning and change are considered normal.

If an organisation is defensive, learning will be inhibited.

Principle 9:
Do not confuse recommendations with solutions.

Recommendations should set out what improvement is needed, without defining how that improvement is to be achieved.

Solutions are concerned with satisfying recommendations in a way that is practical, effective and sustainable.

Good recommendations allow opportunity for a range of solutions. Recommendations should be linked to system performance such that the reason for the change remains understood as the solution is developed and implemented.

Recap: The nine principles

1. Be prepared to accept a broad range of types and standards of evidence.

2. Seek opportunities for learning beyond actual loss events.

3. Avoid searching for blame.

4. Adopt a systems approach.

5. Identify and understand both the situational and the contextual factors associated with the Event.

6. Recognise the potential for difference between the way work is imagined and the way work is actually done.

7. Accept that learning means changing.

8. Understand that learning will only be enduring if change is embedded in a culture of learning and continuous improvement.

9. Do not confuse recommendations with solutions.

Acknowledgements

White Paper
“Learning from Adverse Events”

ergonomics.org.uk/resource/learning-from-adverse-events.html

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