The Need For Practical Training

Dangerous Goods Emergence Management Conference – ERAC

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Presentation Material

• Safety moment
• How did we get to training?
  o Assessment, Mitigation, Planning, Training, Exercises…..Assessment
• Planning training and exercises
• Skill development
• Planning the practice
• Why perform practical or simulation based training/exercises?
• Exercise
Safety Moment
Lights ON PLEASE
How did we get to training?

What things do we typically do before training?
Have you ever skipped a step? Why?
Hazard, Risk, Vulnerability, & Capability Assessment (HRVCA)
Mitigation

- **Avoidance:** Actions that eliminate the chance of hazard from occurring
- **Loss Prevention:** Actions that reduce the probability of an occurrence
- **Loss Reduction:** Actions that reduce the consequences of an event
Planning

- Plan for **Response**
- Plan for **Business Continuity**
- Plan for **Recovery**
Ensuring Preparedness

• Training
• Exercises
• Review and Testing
Planning Training and Exercises

• Assessment results (HRVCA, training/exercise AAR, debriefs, outside learnings)
• Estimating capability requirements
• Building and sustaining capabilities

What are the skill elements needed to meet estimated capability requirements?
What are your limiting factors?
Skill Development

What skills do you need?

What stage are you at?

What stage of skill development do you need?
Lets do a test.....
**STAGES OF SKILL DEVELOPMENT**

- **Initiation**: First contact with a skill
- **Acquisition**: Coordination of key elements in the correct order
- **Consolidation**: Execution of the movements of the skill in the correct order with no modifying factors
- **Refinement**: Execution of the skill in a way that is very close to the ideal model in terms of form and speed with modifying factors
- **Creative Variation**: Execution of the skill performed according to the ideal model, responsive to modifying factors through creative variation of the skill
Juggling Skill Development

Initiation
This is juggling!

Acquisition
This is how you do it, now you try.

Consolidation
Practice with no modifying conditions

Refinement
Practice with modifying conditions

Creative Variation
Modify the skill with ease
Initiation
This is flaring.

Acquisition
Here is the procedure. We will walk through this together.

Consolidation
Flare this propane tank while I watch you carefully.

Refinement
Flare at a facility under normal operating conditions.

Creative Variation
Multiple flares of damaged railcars in the middle of nowhere.

STAGES OF SKILL DEVELOPMENT
Planning the Practice (Training Event)

What is the skill?
How do you measure performance?
What level of skill acquisition is currently held?
What level of skill acquisition is needed?
What can be accomplished in THIS practice session (realistically)?

How will you teach this?
How will you use detection and correction (provide feedback)?
How can learners practice on their own time?
<table>
<thead>
<tr>
<th>Teaching Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
</tr>
<tr>
<td>Demonstration</td>
</tr>
<tr>
<td>Discussion</td>
</tr>
<tr>
<td>Brainstorming</td>
</tr>
<tr>
<td>Guided Discovery</td>
</tr>
<tr>
<td>Problem Solving</td>
</tr>
<tr>
<td>Role Playing</td>
</tr>
<tr>
<td>Game Playing</td>
</tr>
</tbody>
</table>

GHD
Why perform practical or simulation based training/ exercises?
Retention Rates

Learning Pyramid

- Lecture: 10%
- Reading: 20%
- Audiovisual: 30%
- Demonstration: 50%
- Discussion: 75%
- Practice doing: 90%
- Teach others: 90%

average student retention rates
Knowing the theory won’t inherently allow you to be successful at the skill.
Discussion Based Training and Exercises

Discussion based training and exercises will typically only develop introductory or acquisition level skills.

In order to get to the refinement you will need:

- Repetition
- Coached practice of the skill
- Individual or peer practice of the skill
- Practice in the presence of modifying conditions
## Types of exercises

<table>
<thead>
<tr>
<th>Planning/Training</th>
<th>Full-Scale Exercises</th>
<th>Functional Exercises</th>
<th>Drills</th>
<th>Games</th>
<th>Tabletop Exercises and Games</th>
<th>Functional &amp; Full Scale Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discussion-Based</td>
<td>Operations-Based</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabletops</td>
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<tr>
<td>Workshops</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Seminars and Workshops
- No previous exercises
- No recent major emergencies
- New Plan
- New Procedures
- New Staff, Leadership
- New Facility, risk or threat
- New mutual aid agreement
- Specific case study
- Executive familiarity

### Drills
- Assess equipment capabilities
- Test response time
- Personnel training
- Assess interagency cooperation
- Verify staff and resource capabilities

### Table-top Exercises and Games
- Practice group problem solving
- Promote familiarity with your Emergency Plan
- Assess plan coverage for a specific risk
- Assess interagency & interdepartmental coordination
- Observe information sharing
- Test group message interpretation
- Test familiarity with roles in plan
- Improve agency contacts

### Functional & Full Scale Exercises
- Assess and improve information analysis
- Assess & improve interagency coordination and cooperation
- Support policy formulation
- Test resource and personnel allocation
- Assess personnel and equipment
- Assess Media Management
Understand the modifying factors and their impacts
Test the procedure / equipment to fully assess limitations
Exercise
Evaluate and Review

• Debrief
• After Action Report (AAR)
• Improvement plan
• Future training and exercise planning
Questions/Comments?