

Lecture 17 – Health and Safety Training Programmes

Student Notes

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Introduction

Health and Safety (H&S) training is a fundamental component of workplace safety. It ensures that employees understand the hazards in their work environment, know how to prevent accidents, and can respond appropriately to emergencies. Beyond compliance with legal requirements, a **well-structured H&S training programme** contributes to building a **strong safety culture**, reducing workplace incidents, and improving overall productivity.

In this lecture, we will explore:

- ✓ The legal requirements for H&S training in Malta.
 - ✓ The different types of training programmes available.
 - ✓ How to develop an effective training programme.
 - ✓ Methods to evaluate training effectiveness using the **Kirkpatrick Model**.
 - ✓ Common challenges in H&S training and how to overcome them.
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Chapter 1: Legal Framework for H&S Training in Malta

1.1 Key Legislation

Employers have a **legal obligation** to provide health and safety training to their employees. The key legislation governing H&S training in Malta includes:

- **Cap. 646 – Occupational Health and Safety Authority Act**
 - Establishes the **employer’s duty** to provide **adequate training**.
 - Grants OHSa the authority to **enforce training compliance**.
- **SL 646.11 – General Provisions for OHS Regulations**
 - Requires **mandatory training** based on workplace hazards.
- **SL 646.13 – Personal Protective Equipment (PPE) Regulations**
 - Employers must **train workers on the correct use of PPE** and, if necessary, provide demonstrations.

- **SL 646.10 – Prevention of Back Injuries (Manual Handling) Regulations**
 - Requires **training on safe lifting techniques** to prevent musculoskeletal injuries.
- **SL 646.24 – Work Equipment Regulations**
 - Mandates that workers receive **training before using machinery** and work equipment.
- **SL 646.25 – Construction Site Regulations**
 - Requires **specific safety training** for construction workers based on site hazards.

 **Why is compliance important?**

Failure to provide adequate training can result in **OHSA penalties, legal action, increased accident rates, and financial losses** for the company.

Chapter 2: Types of H&S Training

2.1 Induction Training

Who Needs It?

- New employees before they begin work.

What It Covers:

- ✓ Company policies and safety rules.
- ✓ Emergency procedures (fire exits, first aid).
- ✓ Reporting hazards.

2.2 Job-Specific Training

Who Needs It?

- Employees performing **hazardous tasks** (e.g., forklift drivers, electricians).

What It Covers:

- ✓ Safe handling of machinery/equipment.
- ✓ Chemical handling and disposal.
- ✓ Safe lifting and manual handling.

2.3 Refresher Training

Who Needs It?

- Employees who have received prior training but need an **update**.

What It Covers:

- ✓ Updates on **new regulations** and best practices.
- ✓ Reinforcement of **critical safety procedures**.

2.4 Emergency Response Training

Who Needs It?

- Fire wardens, first aiders, and general employees.

What It Covers:

- ✓ Fire safety drills and evacuations.
- ✓ First aid training (CPR, bleeding control).
- ✓ Crisis management.

2.5 Behavioural Safety Training

Who Needs It?

- All employees, but especially supervisors and managers.

What It Covers:

- ✓ The **psychology of workplace safety**.
- ✓ How attitudes and behaviours impact safety.
- ✓ Encouraging proactive safety reporting.

2.6 Competency-Based Training

Who Needs It?

- Employees in **high-risk roles** that require **hands-on skills**.

What It Covers:

- ✓ Hands-on training and skill validation.
 - ✓ Ensuring workers **demonstrate** correct safety procedures.
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Chapter 3: Developing an Effective H&S Training Programme

A well-structured training programme follows **five key steps**:

3.1 Step 1: Identify Training Needs

- ◆ **Sources for identifying training needs:**
 - **Risk assessments**
 - **Incident reports** (previous accidents highlight training gaps).
 - **Legal requirements** (what the law requires).

3.2 Step 2: Set SMART Learning Objectives

- ◆ **SMART Criteria:**
 - 🎯 **S** – Specific (Focus on a clear learning outcome).
 - 🎯 **M** – Measurable (Assess performance after training).
 - 🎯 **A** – Achievable (Realistic within the time available).
 - 🎯 **R** – Relevant (Related to actual job risks).
 - 🎯 **T** – Time-bound (Set deadlines for completion).

Example:

"By the end of this training, all machine operators will correctly apply Lockout/Tagout (LOTO) procedures."

3.3 Step 3: Choose Training Methods

- ◆ **Options:**
 - ✓ Classroom-based learning.
 - ✓ E-learning (videos, interactive modules).
 - ✓ Toolbox talks (short safety briefings).
 - ✓ Hands-on practical demonstrations.

3.4 Step 4: Deliver Training Effectively

- ◆ **Key Factors for Success:**
 - ✓ **Engage learners** (interactive sessions, not just lectures).
 - ✓ Use **real-life case studies**.
 - ✓ Ensure **qualified trainers** deliver the programme.

3.5 Step 5: Evaluate Training Effectiveness

This is where the **Kirkpatrick Model** is applied (see next chapter).

Chapter 4: Measuring Training Effectiveness (The Kirkpatrick Model)

4.1 Understanding the Kirkpatrick Model

The **Kirkpatrick Model** is a **globally recognised** framework for evaluating the effectiveness of **training and learning programmes**. Developed by **Donald Kirkpatrick** in the 1950s, it remains one of the most widely used models for assessing both **formal and informal training methods**. This model focuses on **four levels of evaluation** to measure the impact of training on employees and organisational performance:

1. **Level 1: Reaction** – How did learners **feel** about the training?
2. **Level 2: Learning** – Did they **gain knowledge and skills**?
3. **Level 3: Behaviour** – Are they **applying** what they learned?
4. **Level 4: Results** – Has the training **led to measurable improvements** in workplace safety or productivity?



By systematically analysing these four levels, employers can **assess the effectiveness** of their health and safety training programmes and ensure that training investments lead to real improvements in **employee performance and organisational safety culture**.

4.2 Level 1: Reaction – Measuring Engagement and Perceived Relevance

The first step in evaluating training effectiveness is to determine how **participants react** to the training. This level assesses whether employees found the training **engaging, relevant, and useful** for their jobs. The aim is to **measure their perception** rather than just focusing on whether the instructor delivered the content effectively.

◆ Key Questions at Level 1:

- ✓ Was the training engaging and interactive?
- ✓ Did the participants feel that the content was relevant to their job?
- ✓ Were the training materials and resources helpful?
- ✓ Did the participants feel motivated to apply what they learned?

The **most common method** for evaluating reaction is through **post-training surveys or feedback forms** (often referred to as “smile sheets”). These surveys ask learners to rate their experience and provide qualitative feedback.



Thinking Exercise:

- Think about the last training programme you attended. What **made it engaging**?
 - How could it have been improved to **better align with your job responsibilities**?
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4.3 Level 2: Learning – Measuring Knowledge and Skills Acquisition

Level 2 of the Kirkpatrick Model examines **whether the training actually improved learners’ knowledge, skills, attitudes, confidence, and commitment**. Simply attending a training session does not guarantee learning—participants must be able to **demonstrate** that they have understood and retained key concepts.

◆ How to Measure Learning Effectively:

- ✓ **Pre- and Post-Training Assessments:** Compare test scores before and after training.
- ✓ **Practical Demonstrations:** Have workers perform tasks they were trained on.
- ✓ **Interview-Style Evaluations:** Trainers ask participants questions to assess their understanding.

◆ Why is Level 2 Important?

- Helps determine **whether training objectives were met**.
- Identifies **knowledge gaps that need reinforcement**.
- Ensures **employees are confident in applying what they learned**.

 **Example:**

After a **manual handling safety training**, employees complete a practical test **demonstrating the correct lifting technique**. Their performance is evaluated against a **pre-defined scoring system** to ensure they have gained the necessary skills.

 **Research Task:**

- Find **two real-world case studies** where **pre- and post-training assessments** were used to measure the effectiveness of H&S training.
- Compare their approaches and outcomes.

4.4 Level 3: Behaviour – Measuring the Application of Learning in the Workplace

This level assesses whether **employees apply their new knowledge and skills on the job**. It focuses on **real behavioural changes** rather than just theoretical understanding.

◆ **Key Questions at Level 3:**

- ✓ Are employees **following the correct safety procedures** after training?
- ✓ Do supervisors **observe improvements in workplace behaviour**?
- ✓ Have **incident reports decreased** in areas where training was provided?

However, if employees fail to apply what they have learned, it may not necessarily indicate that the training was ineffective. Instead, it could **highlight other issues**, such as:

- ✗ A lack of management support for enforcing new behaviours.
- ✗ Workplace barriers that make it difficult for employees to apply new skills.
- ✗ Organisational culture that does not prioritise safety.

◆ **How to Measure Behavioural Change:**

- ✓ **Workplace Observations:** Supervisors monitor whether employees follow safety protocols.
- ✓ **360-Degree Feedback:** Collect input from co-workers and managers.
- ✓ **Follow-Up Assessments:** Evaluate employee performance **weeks or months after training**.

 **Example:**

After a **PPE training session**, supervisors observe workers for the next **three months** to check whether they **consistently wear safety goggles and gloves** while handling hazardous materials.

Thinking Exercise:

- Why do some employees **resist applying** what they have learned in training?
 - What strategies can employers use to **reinforce behaviour change**?
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4.5 Level 4: Results – Measuring the Impact on Business and Safety Performance

The final and **most crucial level** of the Kirkpatrick Model measures whether the training has led to **real improvements in workplace performance, safety, and key business outcomes**.

◆ Key Questions at Level 4:

- ✓ Has there been a **reduction in workplace accidents** since the training?
- ✓ Have there been fewer **safety violations**?
- ✓ Have safety-related **costs (e.g., compensation claims, legal fines) decreased**?
- ✓ Has productivity improved because of safer work practices?

This level links training outcomes to **key performance indicators (KPIs)**. Companies should set KPIs **before the training programme begins**, so they can accurately measure **progress and impact** afterward.

◆ Common KPIs Used to Measure H&S Training Success:

- ✓ **Reduction in lost-time injury rates (LTIR)**
- ✓ **Decrease in near-miss incidents**
- ✓ **Increase in safety audit compliance**
- ✓ **Improved employee satisfaction with workplace safety**

◆ Example:

After implementing **machine safety training**, a manufacturing company tracks its safety statistics over **six months** and finds that:

- Workplace accidents **decreased by 30%**.
- The number of machine-related **safety violations dropped by 50%**.

◆ How Can Companies Improve Training Impact?

- ✓ **Regularly update training content** based on workplace trends.
- ✓ **Align training with company safety goals**.
- ✓ **Encourage leadership support for safety initiatives**.



Research Task:

- Find a **case study** of a company that used **Level 4 evaluation** to measure the effectiveness of their H&S training.
 - What **KPIs did they track**, and what improvements did they observe?
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4.6 The Benefits of Using the Kirkpatrick Model

- ✓ **Creates a structured, data-driven approach** to evaluating training.
- ✓ Helps **identify training gaps** that need improvement.
- ✓ Ensures training is **cost-effective and delivers measurable results**.
- ✓ Encourages **continuous improvement in workplace safety practices**.

By analysing data at each level, organisations can **adjust training strategies**, ensure employees **retain and apply knowledge**, and ultimately create a **safer, more productive work environment**.

(Source: Adapted from "What is the Kirkpatrick Model? Learn the 4 Levels of Evaluation" – Ardent Learning, 2020.)

Chapter 5: Challenges in H&S Training & Solutions

While **Health and Safety (H&S) training** is critical for workplace safety and legal compliance, its **effectiveness depends on employee engagement, understanding, and application**. However, several challenges can **hinder the success** of training programmes. Employers and trainers must proactively **identify these barriers** and implement **targeted solutions** to ensure that training is both **effective and well-received**.

Below, we explore **common challenges** in H&S training and **effective strategies** to overcome them.

5.1 Challenge 1: Employee Resistance to Training

Why Do Employees Resist Training?

Many employees see H&S training as a **time-consuming, unnecessary, or repetitive** task that does not add value to their work. Common reasons for resistance include:

✗ **Lack of perceived relevance** – Employees believe training does not apply to their specific job.

✗ **Negative past experiences** – Poorly delivered training in the past reduces willingness to participate.

✗ **Time constraints** – Workers may feel that training interferes with their job responsibilities.

✗ **Complacency and overconfidence** – Some employees assume they already "know everything" about safety.

✓ **Solutions to Reduce Resistance**

✓ **Use Real-Life Case Studies:**

- Show **real accident reports** where **proper training could have saved lives**.
- Highlight **legal and financial consequences** of inadequate training.

✓ **Make Training Job-Specific:**

- Ensure that training **directly relates to employees' tasks** and workplace hazards.
- Customise examples to **match the workers' environment** (e.g., construction sites, factories, offices).

✓ **Encourage Participation:**

- Use **interactive discussions** instead of passive lectures.
- Allow employees to **share their own experiences and concerns**.

✓ **Communicate the Benefits Clearly:**

- Explain how training **protects employees' health, reduces risks, and benefits their job security**.
- Show how compliance **avoids fines, accidents, and reputational damage** for the company.

Thinking Exercise:

- Have you ever resisted a training session? What made you feel that way?
- What strategies could have made the training more **relevant and engaging** for you?

5.2 Challenge 2: Language and Literacy Barriers

Why Is Language a Barrier in H&S Training?

Workplaces today often employ a **diverse workforce** with employees from different **linguistic and cultural backgrounds**. If training is delivered in a language that employees **do not fully understand**, **critical safety information** may be misinterpreted or ignored.

✦ Common Issues:

- ✗ Employees **struggle to understand safety signs, instructions, and emergency procedures**.
- ✗ **Technical jargon** or complex language makes it difficult for workers to follow safety guidelines.
- ✗ Workers **hesitate to ask questions** due to language barriers or fear of embarrassment.

✓ Solutions for Overcoming Language Barriers

✓ Use Visual Aids & Demonstrations:

- **Infographics, symbols, and pictograms** help workers understand safety rules.
- Videos and **live demonstrations** are **more effective than written manuals**.

✓ Offer Multilingual Training Options:

- Provide safety materials **in multiple languages** spoken by workers.
- Hire **interpreters or bilingual trainers** when necessary.

✓ Encourage Peer Learning:

- Pair employees with **more experienced, bilingual colleagues** who can assist with translation.

✓ Use Simple, Clear Language:

- Avoid complicated technical terms.
- Use short sentences and **explain key concepts in plain language**.

✦ Example:

- A construction company with **foreign workers translates all safety manuals into multiple languages** and provides **visual instruction cards** for key procedures.

Research Task:

- Look up a **multinational company** and investigate how they handle **language barriers** in safety training.
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5.3 Challenge 3: Lack of Employee Engagement in Training

Why Do Employees Lose Interest?

✗ **Traditional training methods** (long PowerPoint presentations, passive lectures) can be boring.

✗ Employees **don't see an immediate benefit** or real-life application.

✗ **One-size-fits-all training** fails to address individual learning styles.

✓ **Solutions to Increase Engagement**

✓ **Make Training Interactive:**

- Use **quizzes, role plays, and problem-solving activities**.
- Implement **virtual reality (VR) or augmented reality (AR)** for hands-on simulations.

✓ **Incorporate Gamification:**

- Introduce **leaderboards, rewards, and challenges** to make training competitive and fun.

✓ **Use Scenario-Based Learning:**

- Instead of theory-heavy lectures, present **real workplace situations** and ask employees **how they would respond**.

✓ **Encourage Group Discussions:**

- Let employees **share personal safety experiences** and how they handled situations.

✚ **Example of an Engaging Training Activity:**

- **Safety Escape Room Challenge:** Employees must solve safety puzzles to "escape" a simulated hazardous workplace.

Thinking Exercise:

- What training method works best for **you**?
- How would you **redesign a dull training session** to make it more engaging?

5.4 Challenge 4: Limited Training Budgets & Time Constraints

Why Do Companies Limit H&S Training?

✗ **Budget restrictions** – Small companies may **lack funds** for extensive training programmes.

✗ **Productivity concerns** – Employers may **prioritise work output over training**.

✗ **Lack of training infrastructure** – No access to **e-learning platforms, trainers, or proper training spaces**.

✓ **Cost-Effective Training Solutions**

✓ **Use Online & Blended Learning:**

- Implement **e-learning modules** that workers can complete at their own pace.
- Offer **short refresher courses** instead of long, time-consuming sessions.

✓ **Leverage Peer Training & Toolbox Talks:**

- Senior employees can lead **informal, on-the-job training**.
- Conduct **brief safety toolbox talks (5-10 mins) before shifts**.

✓ **Utilise Free or Low-Cost Resources:**

- Government agencies and OHSA **offer free online safety courses**.
- Use **YouTube tutorials and webinars** from reputable sources.

✦ **Example:**

- A manufacturing company **saves costs** by replacing classroom-based training with **interactive e-learning modules**, reducing time away from work.

Research Task:

- Find out what **free or low-cost online safety training programmes** exist for small businesses.

5.5 Challenge 5: Ensuring Long-Term Retention of Training Knowledge

Why Do Employees Forget Safety Training?

✗ **"One-and-Done" Training Mentality:** Employees receive training once and never revisit it.

✗ **Lack of Reinforcement:** No follow-up to check if employees remember procedures.

✗ **Limited Practical Application:** Workers forget information if they don't use it regularly.

✓ **Strategies for Long-Term Retention**

✓ **Use Microlearning Techniques:**

- Break training into **short, digestible lessons** instead of one long session.

✓ **Provide Frequent Refresher Training:**

- Revisit key safety topics **every 6–12 months** to reinforce learning.

✓ **Encourage Daily Safety Conversations:**

- Supervisors should **ask safety questions daily** to keep knowledge fresh.

✓ **Incorporate "Near-Miss" Reporting in Training:**

- Review **real incidents within the company** and discuss what could have been done differently.

📌 **Example:**

- A logistics company **conducts 5-minute safety briefings** before every shift to reinforce training principles.

📄 **Thinking Exercise:**

- What methods have helped you **remember** past training sessions?
- How would you design **ongoing safety reminders** for employees?

📌 **Conclusion & Final Reflection**

💡 **Key Takeaways:**

- ✓ Overcoming resistance and engagement barriers **makes training more effective.**
 - ✓ Using **visuals, simulations, and peer discussions** improves learning.
 - ✓ H&S training **should not be a one-time event**—it must be reinforced **continuously.**
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