VICTORYXR

VR SIMULATION

TEACHER SUPPORT GUIDE

Fire Extinguisher VR Simulation

TARGET GRADE & TOPIC

Middle School & High School Science, CTE / Lab Safety Training, Industrial & Classroom Safety Modules, Workplace Hazards & Emergency Response Procedure.

1 Learning Objectives & Assessment Goals

What This Teaches:

- **Hazard Identification & Environmental Assessment:** How to systematically inspect a facility (warehouse, lab, or classroom) to identify potential fire hazards, including combustible materials, improper ceiling clearances, and unsafe storage of flammable liquids.
- **Emergency Decision-Making (Triple A Protocol):** Evaluating active fire scenarios to make rapid, critical safety determinations—specifically when to assess, attempt to extinguish, or immediately evacuate.
- **Proper Fire Extinguisher Operation (PASS Method):** Mastering the mechanical and practical steps required to operate a fire extinguisher in VR: **P**ull the pin, **A**im at the base, **S**queeze the handle, and **S**weep side-to-side.
- **Fire Safety Literacy & Standards:** Contextualizing real-world safety compliance and protocol standards in workplace and academic environments.

What This Assesses:

- **Visual Hazard Recognition:** Successfully scanning a 3D environment and identifying items that pose fire hazards (e.g., objects turning blue upon proper selection via VR controllers).
- **Situational Risk Assessment:** Determining whether an active fire scenario is safe to tackle with an extinguisher or requires immediate evacuation.
- **Procedural Mastery:** Executing the step-by-step PASS protocol under simulated conditions to successfully extinguish active fires.

2 How This Supports Students on Their Learning Journey

Risk-Free Emergency Simulation

Provides hands-on practice with high-stakes emergency procedures and active fire extinguishing without physical danger or supply costs.

Interactive Recognition & Immediate Feedback

Interactive visual cues (such as target objects highlighting in blue and interactive triggers) give instant feedback when identifying hazards or deploying equipment.

Guided Sequential Mastery

Structures learning progressively—moving from pre-hazard identification to situational evaluation, guided tutorial practice, and full-scale scenario execution.

3 Key Instructional & Gameplay Components

Activity / Station	Student Action & Task Execution	Outcomes & Educational Value
Activity 1: Identify Fire Hazards	Look around the warehouse environment to locate potential fire hazards (combustible materials, ceiling clearance issues, flammable liquids). Target hazards and press the **Right Trigger** to select/highlight them, then click **Submit**.	Reinforces visual hazard awareness and environment safety standards by identifying unsafe conditions before a fire occurs.
Activity 2: Act on an Active Situation	Assess active fire scenarios applying the **"Triple A's"** safety protocol. Evaluate fire conditions to decide whether to evacuate or deploy a fire extinguisher.	Teaches critical situational awareness, risk assessment, and decision-making during active emergency situations.
Fire Extinguisher Tutorial & PASS Execution	Complete the step-by-step tutorial on wielding the extinguisher in VR. Practice the **PASS method** (Pull, Aim, Squeeze, Sweep) to extinguish active fires around the room.	Builds muscle memory and procedural mastery for operating fire safety equipment correctly under pressure.

4 Curriculum Integration & Classroom Implementation

When to Use:

Ideal as an introductory lab safety unit at the beginning of the school year, a CTE workplace safety credential module, or a practical application activity during fire prevention units.

Suggested Session Format:

STEP 1
Warm-Up
5 mins

Discuss common lab/classroom fire hazards and review the PASS method and Triple A emergency rules.

STEP 2
VR Lab Station
15–20 mins

Students complete **Activity 1** (hazard sweep) and **Activity 2** (active fire response & PASS practice scenario), logging hazards found and actions taken on a lab sheet.

STEP 3
Debrief
10 mins

Group discussion reflecting on common missed hazards, decision points on when to evacuate vs. fight a fire, and real-world application of the PASS protocol.