VICTORYXR

VR SIMULATION

TEACHER SUPPORT PAGE / CURRICULAR GUIDE

OSHA VR Simulation

1 Overview & Learning Objectives

This curricular guide supports educators integrating the **VXRLabs OSHA Safety Training VR Simulation** into career and technical education (CTE) or general workplace safety courses. Students navigate a virtual warehouse environment to identify real-world hazards, link them to regulatory standards, and formulate corrective plans.

Key Student Learning Outcomes

- **Hazard Identification:** Recognize primary structural, electrical, egress, and equipment hazards in an industrial workplace setting.
- **OSHA Citation Mapping:** Associate observed safety violations with specific standard citations under OSHA 1910 (General Industry) and 1926 (Construction).
- **Corrective Planning:** Articulate required safety remediations to achieve full compliance and minimize workplace risk.

2 OSHA Violation Mapping Matrix

Violation Title	OSHA Standard Citation	Description & Safety Impact	Required Corrective Action
Broken Equipment Not Tagged	Section 1910.145	Damaged equipment left in active zones without warning tags leads to accidental operation or injury.	Attach "Out of Service" or "Do Not Operate" accident prevention tags and report equipment.
Wet Spot Near Electrical Equipment	Section 1910.303(b)(1)	Liquids near energized electrical equipment create severe electrocution, short-circuit, and fire hazards.	De-energize area if necessary, clean spill immediately, and post slip/hazard warning signage.
Door is Not an Exit	Section 1910.36(c)(1)	Doors that do not lead outside or to an approved discharge path can trap occupants during evacuations.	Mark non-exit doors clearly with "NOT AN EXIT" signage to prevent confusion during emergencies.
Blocked Exits	Section 1926.34(a)	Storage crates or pallets obstructing exit corridors impede rapid evacuation from building structures.	Clear all obstruction materials from exit passageways; maintain continuous, unobstructed egress paths.

Violation Title	OSHA Standard Citation	Description & Safety Impact	Required Corrective Action
Locked Emergency Exit	Section 1910.36(d)(1)	Exit doors locked from the inside prevent occupants from exiting without keys or tools during fires or emergencies.	Remove locking mechanisms requiring key/special knowledge from the inside; install panic hardware.
Non-Visible Exit Signage	Section 1926.34(b)	Exit paths or doors lacking clear visibility prevent rapid identification of egress routes in poor visibility.	Install illuminated, clearly visible "EXIT" signs with direction arrows pointing to exit paths.
Missing/Improper Extinguisher Placement	Section 1910.157(c)(1)	Absence of portable fire extinguishers or unmounted units delays emergency fire response times.	Mount portable fire extinguishers in designated, readily accessible, and clearly marked locations.
Ladder Not on Stable Surface	Section 1910.23(c)(4)	Ladders placed on unstable, uneven, or slippery surfaces risk accidental displacement and fall injuries.	Secure ladder bases on flat, stable ground, or secure top/bottom before climbing.

3 Recommended Instructional Plan (60 Minutes)

1 Pre-VR Debrief — 15 Minutes

- Introduce OSHA Standards 1910 and 1926.
- Provide students with a hazard inspection sheet/log.
- Explain navigation and interaction controls for VXRLabs.

2 VR Simulation Run — 25 Minutes

- Students enter the virtual warehouse to conduct a complete walk-through inspection.
- *Tip for Classrooms:* Cast the active headset view to a smartboard or display screen so remaining students can participate collaboratively.

3 Post-VR Review & Discussion — 20 Minutes

- Compare identified hazards against the Master Violation Matrix.
- Discuss how physical hazards directly translate to legal citations and potential workplace injuries.

4 Assessment Rubric

Level	Identification Criteria	OSHA Citation Accuracy	Mitigation Plan Quality
Exemplary (4)	Identifies 8/8 violations in VR.	Maps all 8 violations to exact section numbers.	Provides complete, compliant corrective measures for all points.
Proficient (3)	Identifies 6–7 violations in VR.	Maps 6–7 violations to correct standards.	Provides clear corrective measures with minor details missing.
Developing (2)	Identifies 4–5 violations with prompts.	Maps violations generally without standard numbers.	Identifies basic fixes but omits regulatory standard procedures.
Needs Improvement (1)	Identifies fewer than 4 violations.	Unable to associate hazards with OSHA standards.	Fails to provide appropriate corrective actions.

5 Facilitator Technical Setup

Play Area

Ensure a safe boundary area (6 ft × 6 ft per player) cleared of physical obstructions.

Casting/Screen Sharing

Connect headsets via WebRTC or direct casting to monitor student progress in real-time.