

Fire Fighting and Safety Training for the Workplace

- Using VR/AR to deliver fire fighting training
 - how to identify different types of fires in a workplace
 - what type of fire extinguisher to use for certain fires and spills (e.g. don't use the CO2 extinguisher for combustible materials and flammable gases/metals)

Type Extinguisher	Fire	CLASS A	CLASS B	CLASS C	CLASS D	Electrical	CLASS F	Comments
		Combustible materials (e.g. paper & wood)	Flammable liquids (e.g. paint & petrol)	Flammable gases (e.g. butane and methane)	Flammable metals (e.g. lithium & potassium)	Electrical equipment (e.g. computers & generators)	Deep fat fryers (e.g. chip pans)	
Water		✓	✗	✗	✗	✗	✗	Do not use on liquid or electric fires
Foam		✓	✓	✗	✗	✗	✗	Not suited to domestic use
Dry Powder		✓	✓	✓	✓	✓	✗	Can be used safely up to 1000 volts
CO2		✗	✓	✗	✗	✓	✗	Safe on both high and low voltage
Wet Chemical		✓	✗	✗	✗	✗	✓	Use on extremely high temperatures

- VR/AR can be used for delivering fire safety training too
 - E.g. how to identify hazards which may lead to a fire such as a kettle near cables or how often power boards should be replaced to prevent short circuits which may lead to fires
 - This part is to do with identifying hazards, not fighting fires
- Can be like a game tutorial where you are guided through scenarios and there are pauses where you have to choose the correct option (e.g. which fire extinguisher to use given a certain material causing the fire in the scenario), if the incorrect option is chosen then the consequence will be shown (e.g. wrong extinguisher = fire grows bigger) and the user will have to try again
- May have an NPC in the scenarios to guide the user through the training modules – makes the training more effective as there is a demonstration rather than the user just going through the training by reading instructions
- This project idea can be extended other areas of OHS training in the workplace in SES 3B
 - E.g. proper manual handling techniques, ergonomic training for office workers who sit all day