VICTORYXR

VXRLABS EXPERIENCE

TEACHER SUPPORT GUIDE

AED Simulation

(VXRLabs Experience)

TARGET GRADE

Middle School / High School Health Education, Physical Education, First Aid & CPR/AED Certification Prep, or Anatomy & Physiology

TOPIC

(Emergency Response, Cardiac Arrest & Medical Lifesaving Operations)

1 Learning Objectives & Assessment Goals

What This Teaches:

- **Emergency Response & Scene Assessment:** Identifying cardiac arrest symptoms, establishing unresponsiveness, and directing bystanders to call 911.
- **AED Operational Protocol:** Proper sequential execution of automated external defibrillator steps —powering on, clearing upper body clothing, applying adhesive pads, and administering shocks safely.
- **Cardiopulmonary Resuscitation (CPR) Transition:** Integrating AED prompts with continuous chest compressions and rescue breathing.

What This Assesses:

- **Sequential Procedural Accuracy:** Mastery of exact first-responder step sequences under simulated emergency conditions.
- **Safety & Hazard Awareness:** Ensuring all bystanders and emergency responders stand clear of the patient during heart rhythm analysis and shock delivery.
- **Real-Time Decision Making:** Timely execution of physical interventions without hesitation during life-critical scenarios.

2 How This Supports Students on Their Learning Journey

Tactile Experiential Kinesthetics

Translates passive step-by-step CPR/AED instructions into hands-on actions (shouting for help, squeezing pad packaging, placing electrodes, pressing shock buttons).

Risk-Free Environment for High-Stakes Training

Allows learners to make, correct, and learn from procedural errors in a safe, controlled virtual emergency setting.

Immediate Audio-Visual Feedback

Guided voice prompts, on-screen text, and visual feedback immediately reinforce correct technique and prompt necessary corrections.

Confidence & Muscle Memory Building

Repeated exposure to the emergency workflow reduces panic responses and builds muscle memory for real-world medical emergencies.

3 Key Instructional & Gameplay Components

Phase / Action	Student Action & Task Execution	Outcomes & Educational Value
Assessment & Scene Call	Check unresponsiveness (tap shoulders, shout); command someone to call 911 or initiate the call.	Establishes critical first-responder protocols and emergency notification routines.
AED Retrieval & Power On	Retrieve the AED unit and press the main Red Power Button to turn on audio prompts.	Teaches rapid deployment and reliance on AED voice instructions.
Patient Preparation	Remove all upper body clothing from the patient to expose bare skin.	Reinforces proper pad placement requirements for electrical current transfer.
Pad Application	Grab the electrode pad package, squeeze the front trigger to open, and apply pads to the designated upper-right and lower-left chest areas.	Trains precise anatomical placement of defibrillation pads as shown in diagrams.
Rhythm Analysis & Clear	Stand clear of the patient while the device analyzes heart rhythm; do not touch the patient.	Assesses patient safety protocols and prevents movement interference during ECG analysis.
Shock Delivery	Confirm no one is touching the patient when shock is advised, then press the flashing red shock button.	Executes critical life-saving shock delivery safely and decisively.
Post-Shock CPR	Immediately resume chest compressions and rescue breaths as directed by the device.	Links defibrillation directly back to continuous CPR cycles until medical help arrives.

4 Curriculum Integration & Classroom Implementation

When to Use:

Ideal as a hands-on application lab during First Aid/CPR units, or as practical skill verification following classroom lecture instruction.

Suggested Session Format:

STEP 1
Warm-Up
5 mins

Review the Cardiac Chain of Survival (Early Access, Early CPR, Early Defibrillation, Early Advanced Care).

STEP 2
VR Station
15–20 mins

Students complete the AED simulation exercise, running through patient evaluation, pad placement, shock delivery, and chest compression administration.

STEP 3
Debrief & Reflection
5–10 mins

Discuss key safety checks (e.g., why standing clear is essential) and address any points of hesitation experienced during the simulation.